

SAWTOOTH SCIENCE INSTITUTE

P.O. Box 2167
Sun Valley, Idaho 83353
(208) 788-9686
<http://imnh.isu.edu/ssj>; gertchri@isu.edu

2009 WORKSHOP SYLLABUS

GPS FOR THE CLASSROOM – August 4-5, 2009

Workshop description: Using GPS/GIS technology in the classroom

With the ability to harness the power of up to 12 of the 24 satellites that orbit 12,500 miles above the earth, at a fraction of the cost of a computer, many teachers are turning to the Global Positioning System (GPS) to capture students' imaginations. This class focuses on using a GPS as an educational tool. We first provide a foundation of what a GPS is and how it works. Next, we assist participants with practical skills needed to use the GPS (we will provide GPS units or bring your own). Finally, we offer general ideas for application and specific project-based learning examples for effectively using this technology tool.

Cost: \$50 Workshop Fee, \$50 Recording Fee

Section: 59 BIOL 498P Section: 59

Index number: 152011

Limit: 15

Instructors: Alana Jensen, Stoller Corp., Michael Breen, Carey High School

Grades:

This course, section 59, is offered for undergraduate BIOL credit 498P, index number: 152011. **IF YOU ARE TAKING THE COURSE FOR CREDIT:** You will need to indicate that you wish credit on the registration form, pay a \$50 recording fee in addition to the workshop fee, and prepare a short assignment that demonstrates the use of the professional development workshop to your continuing education. This assignment is **due two weeks** after the workshop. Send it to the Sawtooth Science Institute, P.O. Box 2167, Sun Valley, Idaho (83353) or email: gertchri@isu.edu. Questions? Call or email Chris Gertschen, (208) 788-9686.

Our goal in this workshop is to communicate our passion for Idaho's wonderful natural resources and to provide you with new educational resources to create that passion in your students. It is our hope that the new information will enable you to incorporate the materials and new learning into your classroom. The required assignment may be chosen from the following alternatives:

- * Write a lesson plan or a unit for your classroom showing how the new information or materials will be used and how it meets your district or state standards
- * Prepare a brief or short portfolio. You may want to include copies of your field notes, photographs, or maps. Remember: We prefer to receive copies of the originals as it is not possible to return your portfolio to you.
- * If you don't see yourself using the information at this time, please hypothesize a

setting where you could see yourself using the information. Perhaps it would be possible to work with another teacher in your school to use the new information.

It is most important that you prepare a lesson that is USEFUL TO YOU! Our intent is that you create something that is of use to you so please keep a copy – or better yet, send in a copy and keep the original. In most cases, your assignment will not be returned to you.

NOTE: This course is considered a fall course and grades (satisfactory, unsatisfactory, incomplete) may not be available until December, 2009. Questions about grades or to request a transcript, should be addressed to the ISU Registrar at 282-3336. Because it takes place before the September 1 deadline that most recertifying or lane change folks face, it will most likely be accepted. As long as you have COMPLETED the course prior to the September 1 deadline, you should be able to submit a temporary transcript which will need to be exchanged for one that will be available from ISU in December, 2009.

If you need an acknowledgement verifying your completion of the course prior to September 1 from SSI, please ask (788-9686). We're happy to help.

Bring:

- Mountain weather clothing layers - windbreaker, raingear, hat
- Sturdy, comfortable hiking shoes/boots are a must!
- Camera - optional but suggested
- Sunscreen, bug repellent
- Lunch, snacks, water
- Notebook, pen/pencil (backpack or fanny pack)
- GPS unit if you have one. We will provide a GPS unit for those who don't .

Schedule:

Meet at Stoller Corp. in Idaho Falls (120 Technology Drive)

9:00 - 3:00

August 4-5 (Tuesday and Wednesday)

Tuesday, August 4

9:00 am – Introductions

9:15 - 11:00 am – GPS Basics

11:00 – 2:45 - GPS in the field - Freeman Park

Teachers will learn what GPS is, how to work with a GPS unit, initialize it, program it, collect data, enter data, clear data, how it is used in the real world and why it is important in education. Geocaching, Ecocaches, Travel Bugs, Confluence and Scavenger Hunts will be covered.

Note: We will lunch in the field so bring your lunch, water, and all your gear

2:45 – 3:00 – Return to Stoller office

Wednesday, August 5

9:00 – 10:00 am – Introduction to GIS including data dictionaries, editing points, projections, and exporting to GIS.

10:00 – 12:00 pm – Basics of ArcView Voyager software (free to schools)

12:00 – 12:30 pm – Lunch

1:00 – 4:00 pm – Field data collection and data manipulation in ArcView Voyager

2/25/09 aj/cg