

**From:** Joanna K Philippoff <philippo@hawaii.edu>  
**Subject:** Professional Development: TSI Aquatic Science  
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**To:** hasta-L@lists.hawaii.edu  
▶ 1 Attachment, 344 KB

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Please see the announcement below for an opportunity for in-service middle and high school teachers to participate in a professional development project Teaching Science Inquiry: Aquatic Science with the University of Hawaii at Manoa. The first of the TSI Aquatic workshop series will be held in Oahu during the 2010-2011 school year. We will then continue the TSI Aquatic workshop series on the Big Island, Maui, and Kauai over the course of the next three years.

**Aloha**, we are pleased to announce a professional development opportunity. The program is based on the Teaching Science as Inquiry (TSI) courses at Curriculum Research & Development Group, University of Hawaii Manoa and focuses on aquatic science.

This project will deliver professional development in both marine science content and science teaching pedagogy. The purpose of this course is to introduce teachers in Hawaii to scientific inquiry teaching methodologies and to also engage students of grades five through twelve in authentic scientific inquiry while promoting interest and engagement in Science, Technology, Engineering and Mathematics (STEM).

#### **Four Aquatic Science Modules**

The program consists of four "modules" - each with a 2-day workshop followed by an online component and a short evening in-person follow up. The first two Oahu workshops will be held this school year (Oct 29/30 and Feb 11/12), the 3rd and 4th modules would be held next school year (~Aug/Sept 2011, ~March 2012).

These "modules" will each focus on one of the disciplines of aquatic science:

1. physical
2. chemical
3. biological
4. ecological

The interdisciplinary nature of aquatic science allows many concepts to be taught in the context of the oceans. We are hoping to reach not only marine science teachers but also those who teach more traditional classes like physics or chemistry. Activities will engage teachers in learning and teaching marine science while integrating NSES and HCPS III standards at various grade levels. The curriculum will also incorporate the Ocean Literacy Principles, which define via fundamental principles and concepts what one needs to understand about this defining feature of our planet; understanding the ocean's influence on you and your influence on the ocean.

#### **Research & Evaluation (stipends, substitute coverage, supplies - PDE3 also available)**

Participation in the project will include our research in assessment and evaluation. In addition to receiving supplies and curriculum, as a thank you for completing the evaluation portion of the project we are paying a stipend of \$300 (per module, \$1200 total) as well optional PDE3 credit (requires portfolio).

If you are a pre-service teacher, we hope you will join us for the workshops. We will not be able to provide a stipend or a supply kit. However, you will receive a certificate of participation as well as the resource materials. We would appreciate your input and experience.

## Project Application

More details on the project can be found in the attached flyer that has a link to the application.

### **We are asking for completed applications by Aug. 31st.**

We are going to teach the TSI Aquatic workshop series on Oahu, Maui, Kauai and the Big Island over the course of the next three years. We hope to develop local marine science communities on each island, which is one of the main goals of this project. We hope you will share this information within your schools and with your colleagues

Please don't hesitate to contact us with any questions.

Mahalo

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Apply now to participate in CRDG's TSI Aquatic Science research program

# Teaching Science as Inquiry (TSI)

## PROFESSIONAL DEVELOPMENT

**OAHU**

Funded by a US Department of Education research grant

Funded by a US Department of Education research grant

MIDDLE & HIGH SCHOOL TEACHERS

## FOUR PART AQUATIC SCIENCE MODULE SERIES

Explore aspects of marine and freshwater ecosystems:

- (1) physical,
- (2) chemical,
- (3) biological, and
- (4) ecological.



**LOCATION:** UH Mānoa



**COURSE:** Module 1, Oct. 29/30  
(Fri. & Sat.) 8:00am – 4:00pm



**FOLLOW UP:** Module 1, Dec. 1 (Wed.)  
5:00pm – 8:00pm



**Modules 2, 3, & 4:** Dates TBD by participants.

**Stipends:** Participation in follow-up research, including course development, evaluation, and classroom assessment is MANDATORY. Participants will be paid a \$1200 stipend for full participation in research on all four modules (\$300 per module).

**Credit:** PDE3 credits available for DOE teachers

**Substitutes:** Substitute coverage available for Fri. courses

**Apply by August 31, 2010. Space is limited to 13 participants.**

**For more information or to download an application  
visit us online at [www.hawaii.edu/crdg/pd](http://www.hawaii.edu/crdg/pd)**



University of Hawai'i at Mānoa  
**Curriculum Research  
& Development Group**

*Providing quality educational programs  
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