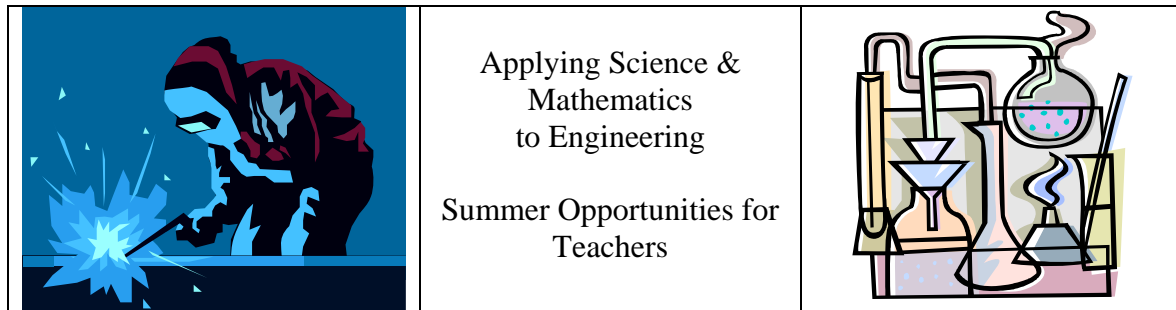


Oregon State University  
Department of Science and Mathematics Education



Two, intensive, week-long courses will be offered this summer accompanied by a 2-credit projects course to support you in applying the ideas from the summer work in your classroom during the following year. These courses have been designed to complement each other in developing cross-curricular content that presents the fascinating world of engineering to students. SED 506, the projects course for 2 credits, is included in the tuition stipend support.

**SED 599 *Teaching Science Through Engineering Concepts***

3 credits from the Department of Science & Mathematics Education, College of Science, Oregon State University.

Instructors: Dr. Larry Flick and Len Cerny

June 19-23 in the Portland area, site to be determined

June 26-30, 2006 at the OSU Campus

This hands-on, participatory summer course is designed to teach science concepts through construction engineering applications. Physical science and integrated science teachers as well as technology and math teachers will find this course valuable. The course content is presented through practical, classroom-tested activities using teaching strategies that actively involve students with science concepts. Teachers will experience first hand a series of fun and engaging activities that give students deeper understanding about both the science concepts and the fascinating world of engineering. Each course segment will include ideas for both formative and summative assessments aligned with Oregon science standards. Tuition stipend support. More information available at: <http://www.pcc.edu/BCTNSF> click on "Teacher Resource Page"

**SED 589 *Designing Dynamic Spreadsheets***

3 credits from the Department of Science & Mathematics Education, College of Science, Oregon State University.

Instructors: Dr. Maggie Niess, Gogot Suharwoto, Pejmon Sadri, and Kwangho Lee

June 19-23, 2006

This hands-on, practical and participatory summer course is designed to focus science and mathematics teachers' attention on integrating science and mathematics principles in the world of design through the use of spreadsheet problem solving. Designing dynamic spreadsheets allow the students to investigate various scenarios for consideration in the solution to engineering design problems. The teachers' job is to carefully scaffold students' learning about both spreadsheets and solving engineering problems. The course content is presented through practical, real-world application problems in teaching science and mathematics through engineering problems. Both science and mathematics teachers will find this course valuable. Each course segment will include ideas for both formative and summative assessments aligned with Oregon science and mathematics standards. Tuition stipend support.

Registration information available after January 15, 2006

[http://oregonstate.edu/dept/sci\\_mth\\_education/](http://oregonstate.edu/dept/sci_mth_education/) click on EUSES