## UCI 21<sup>st</sup> Summer Science Institute August 6 – August 24, 2001 for K-12 Teachers of Science

Opportunities for Professional Growth in Science All courses are referenced to the California Science Content Standards

**Reading and Art Interfaced with Science - Grades K-5.** Content Area Focus: Reading, Art and Science. 1 WEEK Integrate all three areas in the classroom while students seamlessly learn the content of the various standards.

**Biology for Elementary Teachers - Grades K-7.** *Content Area Focus: Biological Science.* **1 WEEK**Develop an understanding of everyday biological phenomena that can be easily incorporated into the elementary classroom.

Physical Sciences with Mathematics Integration - Grades 3-8. Content Area Focus: Physical Science. 1 WEEK Understand the physics and mathematics involved from flight to bottle rockets, to silly putty.

**Earth Science in the Elementary Classroom - Grades K-6.** *Content Area Focus: Earth Science.* **1 WEEK** Trace the origin, growth, uses, processing, renewal, and conservation of our natural resources.

**Problem Based Learning** *Grades 6-8. Content Area Focus: Life, Earth and Physical Sciences.* **1 WEEK** An inquiry based approach to classroom instruction to help students understand the nature of science.

**Ecology of Orange County** – **Grades K-8**. *Content Area Focus: Life, Earth & Physical.* **2 WEEKS** Explore the ecology and geology of Orange County through a field studies approach. An integrated investigation of life, earth and physical sciences of the unique abiotic and biotic factors of our county.

**Best of the Exploratorium and Lawrence Hall of Science - Grades 7-10.** Content Area Focus: Physical Science. **2 WEEKS** Experience hands-on, cohesive and meaningful activities integrated with the science content necessary to understand light, electricity and chemistry. Construct your own classroom science materials.

MESA: Building the Future Today - Grades 7-12. Content Area Focus: Physical Science, Mathematics, Engineering. 1 WEEK Delve into the mathematics science and engineering concepts behind traditional MESA activities.

WEB QUESTS I, Internet Resources in the Classroom – *Grades K-12. Content Area Focus: Life, Earth or Physical. 1 WEEK* Develop lessons around the content area of your choice and then publish them on the Institute web pages

WEB QUESTS II, Internet Resources in the Classroom – *Grades K-12*. Content Area Focus: Life, Earth or Physical. 1 WEEK Go beyond simple webquests. Develop your skills and a higher level of expertise

**Independent Study - Grades K-12.** Content Area Focus: Life, Earth or Physical Science. **On your own time.** Align your curriculum to the Standards, develop a science curriculum unit or undertake a teacher based research project.