

On-line CAMEO Training Through the University of California at Davis - Extension

By Kevin M. Smith, Certified CAMEO Instructor & U.C. Davis Extension Instructor

Introduction

The CAMEO program has a lot going for it. As we all know:

- CAMEO is one of the best tools out there for haz mat emergency response and pre-planning.
- CAMEO is free to download for anyone who is interested. This makes it available even to agencies and people who otherwise could not afford to purchase a comparable set of programs.

However, CAMEO does suffer one MAJOR problem ... **lack of training opportunities**. This is basically due to:

- Lack of Qualified Instructors – Only 65 federally certified CAMEO Instructors.
- Unequal dispersion of CAMEO Instructors
 - The vast majority of CAMEO Instructors are located east of the Mississippi River.
 - There are only 5 CAMEO Instructors located west of Denver. This makes it very difficult for those in the Western United States to obtain CAMEO training.

One Solution – On-line CAMEO Training

Recognizing this problem, in 1994 I worked with the University of California at Davis to have them offer on-line training in CAMEO, to which they agreed. I designed the CAMEO on-line courses, and have been teaching them on-line through UC Davis Extension ever since. Each course is presented in a quarter. They are designed so students can complete the course at their own pace, on their own schedule. There is no set class schedule other than the beginning and ending dates of the classes. Students can access these courses and take the quizzes and exams at any time, 24 hours a day. Each quiz, as well as the final exam, are scored by computer instantly after they are completed, and students can see the results right away. At any time they can e-mail me with any questions or problems, and I will get back to them in a timely manner. In fact, I had one student complete the CAMEO 2 course in just 12 hours and 46 minutes from when he first logged on, and his scores on the quizzes and final exam earned him the grade of “A”!

There are two courses in the CAMEO series, described below:

- **CAMEO 1** – This course presents CAMEO Chemicals and ALOHA. There are no prerequisites for this class.
- **CAMEO 2** – This course continues with the MARPLOT mapping program and the CAMEO Database. The final lesson requires use of all four programs of the CAMEO suite, and is basically a scenario based session using virtually *every* aspect of the four programs. In this scenario, an 8.7 magnitude earthquake has hit Orange, California, and has caused over 40 hazardous materials releases, with many more being reported by the minute. This gives us the opportunity to have the students use about everything that CAMEO can do, and to do it quickly and accurately.

CAMEO 2 requires that students either have completed the CAMEO 1 course successfully, or have experience using all facets of CAMEO Chemicals and ALOHA. I consider students who have passed the CAMEO 2 course to be true CAMEO gurus!

Course Format

Each course is divided into several lessons. Each lesson presents a particular aspect of CAMEO, along with step by step instructions as to how to use the programs. These lessons are downloadable in written form for the students and can provide them with a paper copy of the lessons, if the student so wishes. At the end of each lesson are exercises for the students, and each lesson ends with a quiz. The quiz is taken on-line and is graded instantly. At the end of the course is an on-line final exam, and requires the student to handle several different haz mat scenarios using all aspects of the software. All quizzes and the Final Exam are presented in multiple choice exam format, and are graded instantly once the "Submit" button is pushed. Grades are based on the combined scores for the chapter quizzes and the final exam.

Student Questions

While the vast majority of questions a student might have are answered in the written class materials, there is always the need to have someone the student can talk to if there is a concept they are not understanding or if they find they are not getting the same answers that you expect. For this reason, the students are provided with several means to contact me. The on-line classroom at UC Davis provides all students with a means to e-mail their instructors with any questions. In addition, I provide my students with my phone number, because often understanding can be enhanced by walking the student step-by-step through a problem while they are using the software on their computer. This helps insure that no student is left behind, and every student understands how to use the software. Most often when there are problems, there is a simple step the students forgot.

Updates to Courses-

When there are changes made to the software, I personally modify the courses to match the software changes, thus keeping the courses up-to-date. If a change in software is made during a particular quarter, the update is made to the course prior to the start of the next quarter. (I have students remain with whatever software version was current at the start of that particular quarter). I am currently working on the upgrade of CAMEO 2 to teach the MARPLOT 5 mapping program. This needs to be completed in time for the CAMEO 2 course scheduled to begin at the start of June, 2015.

Cost -- \$395 per course

University Units: 2.4 per course. Discounts are offered by the university for 3 or more registrations.

Certificate – Both the CAMEO 1 and CAMEO 2 courses earn credit for the *Workplace Health and Safety Certificate* from the University of California at Davis.

You can read about these courses at <https://extension.ucdavis.edu/subject-areas/emergency-management> .

CAMEO Training Funding through NIEHS

The CAMEO training offered through UC Davis Extension is subsidized by a grant from the National Institute of Environmental Health Sciences (NIEHS). NIEHS is one of 27 research institutes that comprise the National Institutes of Health, part of the U.S. Department of Health and Human Services.

This grant is just under \$250,000 per year. The grant is shared through a consortium of five universities, consisting of the following universities:

- University of California – Davis
- University of California Los Angeles
- University of California Berkeley
- Arizona State University
- University of Washington

UC Davis uses their portion of the grant to provide on-line CAMEO training. Money from this source was used to create the on-line CAMEO courses, and is also used to provide this training to students at costs lower than would be typically charged for an on-line class. Funding through this grant for CAMEO training has been provided continuously since 1994.

In August, the University of Washington will be using their share of the money to provide a two day CAMEO course in Spokane, Washington at the National Tribal Emergency Management Conference. This training is specifically provided for American Indian tribal emergency responders. It is being hosted by the Northwest Tribal Emergency Management Council, which is a consortium of Indian tribes from Alaska, Washington, Oregon, and Idaho.

About the Instructor

Kevin Smith first started using CAMEO in 1987, and became a federally Certified CAMEO Instructor in 1990. In addition to teaching CAMEO classes throughout the Southern California area, he has taught the CAMEO classes offered at the *Continuing Challenge* Haz Mat Workshop in Sacramento every year since 1992 (The *Continuing Challenge* Haz Mat Workshop is the largest workshop of its kind offered in the Western United States).

Kevin served in the Haz Mat field for 28 years, retiring in 2014 as Deputy Fire Marshal from the Chino Valley Fire District. He is certified by both the California Specialized Training Institute (part of the California Office of Emergency Services) and the California Fire Marshal's Office as a Haz Mat Instructor and as a Haz Mat Specialist. He has responded to over 1,000 haz mat incidents over the course of his career. Kevin earned a Master of Public Administration Degree and a Bachelor's Degree in Political Science (Public Administration emphasis), both from Cal-State Fullerton, and two Associate of Science degrees in Fire Technology, one with an emphasis in Hazardous Materials, and the other emphasizing Fire Protection, both from Santa Ana College. He earned the 24 unit Certificate in Hazardous Materials Management from the University of California at Irvine, then taught the 3-unit Hazardous Materials Planning course of that certificate program for UC Irvine for several years. He later designed & taught the on-line version of that same class for the University of California. Kevin also taught many hands-on haz mat emergency response courses for UC Irvine.

Kevin owns California Hazard Environmental Services (CHES) a haz mat training and consulting company, which he started in 1994. His phone number is (714) 856-3479, and his e-mail address is plancmil@aol.com.