

## Instructor Bio

### **Dr. Jack R. Ferguson**

Jack Ferguson is manager of the SEI Appraisal Program. He has 40 years of experience in engineering, mainly related to the U.S. space program.

He led the teams that developed the Software Acquisition CMM and the CMMI Product Suite.

He has a PhD in Aerospace Engineering from the University of Texas at Austin.

### **Kristi L. Keeler**

#### **Senior Member of the Technical Staff**

#### **Acquisition Support Program**

**Kristi Keeler is a Senior Member of the Technical Staff with the Acquisition Support Program at the Software Engineering Institute (SEI), where she participates in ASA(ALT)-sponsored activities to improve acquisition practices throughout the Army.**

Prior to joining the SEI, Ms. Keeler was a Principal Consultant/Deputy Program Manager for Computer Sciences Corporation in Falls Church, VA. As Principal Consultant, Ms. Keeler provided software engineering and process improvement appraisal and consulting support to customers within CSC as well as external customers like DFAS (HQ, Denver, Kansas City). Internal CSC customer support included assignment as Deputy Program Manager for an Air Force logistics and planning development program. While employed by CSC, Ms. Keeler was assigned to the SEI as a Resident Affiliate where she worked on the CMMI Product Development team as an author and training developer. Ms. Keeler is an authorized instructor of the Introduction to CMM, Intermediate Concepts of CMMI, and CMMI Transition Workshop.

Before joining CSC, Ms. Keeler worked for multiple consulting and development organizations in areas of software engineering, full life cycle development and support, independent validation and verification of deployed systems, quality assurance, and process improvement.

Ms. Keeler earned a Master of Science degree in Computer Science from Rutgers University in New Brunswick, NJ. She has over 30 years of software engineering and program management experience across both Department of Defense and Commercial industry organizations. Her expertise includes program management, software engineering, financial management systems, telecommunications, IV&V and process improvement.

# Outlines

## *COURSE DESCRIPTION*

This course has been updated to support Version 1.2 of the CMMI Product Suite. This five-day course introduces candidate SCAMPI Lead Appraisers, candidate CMMI instructors, systems and software engineers, engineering process group (e.g., EPG, SEPG) members, and others to detailed CMMI concepts, including the relationships among CMMI model components. CMMI models are tools that organizations can use to help improve their ability to develop and maintain quality products and services.

The course is composed of mandatory pre-class assignments, class lectures, student presentations, and class exercises and is presented in a facilitative style designed to create dialog among participants and instructors. This style of interaction is designed to help each participant gain a deeper understanding of the concepts and practices described in CMMI models. Those successfully completing the course will be able to understand the interrelationship among model components (practices, goals, and process areas), interpret CMMI practices and their experience, and apply CMMI models to appraise and improve processes in organizations.

Successful completion of this course requires the student to attain a passing score of 80% or better on a written, closed book examination that covers CMMI model knowledge and the concepts taught in this course. This course is a prerequisite for SCAMPI Lead Appraiser Training and CMMI Instructor Training. Instructors will evaluate and document each student's participation and presentation/communication skills through their pre-course assignment and in-class activities. This information will be retained by the SEI as an aid to further training that the student may undertake. The instructors will debrief each student discussing this evaluation at the completion of the class if requested by the student.

## *AUDIENCE*

- Candidate lead appraisers for the SCAMPI Appraisal Method
- Candidate instructors interested in teaching the Introduction to CMMI course
- Systems and software engineers, process group (SEPG, EPG) personnel and others who need more in-depth knowledge of CMMI models

## **PREREQUISITES**

*Before registering for this course, participants must*

- *Meet the requirements documented in the CMMI Version 1.2 prerequisites document*
- *Complete an SEI-authorized offering of an Introduction to CMMI course*
- *Successfully complete the CMMI Version 1.2 Upgrade Training (if the Introduction to CMMI course that you attended was based on CMMI Version 1.1)*
- *Complete a minimum of ninety days of self study following the completion of the Introduction to CMMI course*
- *Be able to read, write, and speak understandable English. You will not pass this course if you cannot demonstrate this requirement. Throughout the course, you will be required to present and discuss technical concepts in English. Successful completion of this course is dependent on your class participation and presentations that will be evaluated for skill and comprehension.*

*NOTE: There are no substitutions for this course. Please review SEI Course Terms and Conditions at <http://www.sei.cmu.edu/products/courses/terms.html> regarding substitutions and transfers.*

## **TOPICS**

- *CMMI architecture and product suite*
- *Understanding and comparing CMMI model representations*
- *Generic goals and practices*
- *CMMI model components*
- *Equivalent staging*
- *All CMMI-DEV process areas*
- *Higher maturity and capability concepts*
- *IPPD additions*
- *Overview of the SCAMPI appraisal method*

## **OBJECTIVES**

*This course will help participants to*

- *Establish links from their past model use and experiences to CMMI models*
- *Understand relationships among model components, including both staged and continuous model representations*
- *Understand how to interpret and apply CMMI models effectively*
- *Share, learn, and exchange ideas with other course participants*

For more Information please Visit : <http://www.sei.cmu.edu/products/courses/a02b.html>