ASIAN INSTITUTE OF TECHNOLOGY
SCHOOL OF ENGINEERING AND TECHNOLOGY
Offshore Technology and Management

ELP 1.6: PROJECT QUALITY MANAGEMENT 3(3-0) Semester: JAN 2016

Rationale: Completing a project, or portion of a project, correctly and professionally requires delivering work product that is professional, and complies with legal, ethical and professional standards. Creating deliverables that are "good enough" (professionally accepted) requires leadership skills to guide a team to provide an acceptable level of quality in the work product. The leadership skills to decide what is acceptable quality and implement those decisions include: assessing the required level of project quality considering an organization's corporate culture; legal and ethical requirements and liabilities; and communication among the team and other colleagues; multi-cultural considerations.

Catalogue Description: This course presents project quality management from the perspective of leadership and decision-making. A leader's responsibility is to ensure that the quality of delivered work product complies with organizational, legal and ethical, and client requirements. This course presents the leader's role and decisions in: defining acceptable quality in work product; options available to the leader to implement quality assurance in deliverables; deciding on whether work product meets acceptable quality standards; and, if not, mechanisms available to improve quality.

Pre-requisite:

1. ELP 1.1 : Developing Leadership Capability
2. ELP 1.2 : Communication Skill for Leaders
3. ELP 1.4 : Project Management Practices

Course Outline:

1. The role of project quality in an organization.
1.1. How is project quality team used in an organization?
1.2. Why does a project quality team exist in an organization?
1.3. Project quality management tools: what is available?

2. Project quality requirements
2.1. What is "scope of work"?
2.2. What is "work product"?
2.3. What is "good enough" within a scope of work
2.4. Legal and ethical issues
2.5. Corporate culture
2.6. Professional duty and responsibility

3. Developing a Quality Management Plan.
3.1. Understanding the processes and requirements for setting baselines for project quality.
3.2. Defining organizational requirements for quality in the work product
3.3. Establishing organizational processes to deliver desired quality
3.4. Internal checking, peer review, or inspections of work product
3.5. Organizational processes to ensure compliance with the Quality Management Plan

4. Coordination among professions.
4.1. Understanding and identifying quality assurance and quality control techniques appropriate for different project environments.
4.2. Colleagues, contractors and sub-contractors.
4.2.1. Communication and coordination of quality among departments and project partners
4.2.2. Quality assurance and coordination within each phase of a capacity building project: planning, design, construction, and operation.
4.2.3. Quality assurance and coordination from the design phase to the construction to operational completion to ensure the quality of the completed project.
4.3. Multi cultural environment. Cultural differences in acceptable work product.
4.3.1. Understanding the cultural differences in defining "acceptable work product".
4.3.2. Working and leading a project so that the completed project satisfies operational requirements and that the quality is acceptable for its intended purpose. Capacity development projects are used (or provide service) to a community or country. Service life operations and functionality must be considered in the development of the project, and quality ensured so that the project operates for its intended function and service life.

5. Experiential learning
5.1. Workshops and studio work to illustrate:
5.1.1. What is "good enough"
5.1.2. Multi cultural issues
5.2. Case studies in large scale projects

Laboratory session: 15 hours of interactive session

Textbook: Lecture notes and selected papers

Reference books**:**

1. *Guide to Project Management: Getting it right and achieving lasting benefit,* by Paul Roberts, Publisher Wiley; 2 edition (February 4, 2013)
2. *Project Estimating and Cost Management*, by Parviz F. Rad, Publisher Management Concepts, 2002.
3. *A Guide to the Project Management Body of Knowledge: PMBOK(R) Guide 5th Edition*, by Project Management Institute, Publisher Project Management Institute; 5 edition (January 1, 2013).
4. *'Project Management: A Systems Approach to Planning, Scheduling and Controlling* by Harold R. Kerzner, Publisher: Wiley; 11 edition (February 18, 2013).\

5. *The Advantage: Why Organizational Health Trumps Everything Else in Business,* by Patrick M Lencioni, Publisher: Josey-Bass; 1 edition (March 13, 2012).
6. *Team Turnarounds: A Playbook for Transforming Underperforming Teams,* by Joe Frontiera Publisher: Josey-Bass; 1 edition (July 24, 2012).

Journals and Magazines:

1. Project Management Journal
2. International Journal of Project Management
3. International Journal of Education and Research
4. http://www.projecttimes.com/

Grading system:

1. Mid-semester exam (25%)
2. Final exam (25%),
3. Assignments/projects (30%).
4. Laboratory Sessions (20%).

Instructors:

Expected outcomes: Students, at the completion of this course, will be

1. Capable of interpreting the term 'quality' in terms of output project, product and people.
2. Understanding professional, legal and ethical responsibilities in delivering acceptable quality work product.
3. Capable of creating relationships with the team and provide insight into who they are and what they value. The student will be able to find ways to refute the excuses of the past and raise the expectations. The student will develop skills that make him/her committed to mentoring the team how to be resilient while continually encouraging them to work through disappointments.
4. Capable of applying a variety of planning and scheduling techniques to ensure work product quality in practice through the use of case studies and applied project assignments.
5. Capable of applying effective tools and techniques that will improve the quality of the output of the project.
6. Capable of integrating Project Quality Management processes into the overall project plan and preparing a Project Quality Management plan.
7. Capable of identify and describe the roles and responsibilities needed to plan and execute the Project Quality Plan.
8. Capable of working together in a team environment to complete a Project Quality Management plan for a project.
9. Capable of planning how to apply the techniques for managing project quality to the broader context of organizational or enterprise continuous quality improvement.