

## CEE-9510 Study Guide

You are RESPONSIBLE for ALL material that has been presented or made available to you in this course. The only exception is the quality module (Lecture week 8 – Project Quality Management). This study guide does not absolve you from knowing any materials, but used in association with studying everything, it will provide you an idea of what kind of emphasis to apply while studying. There will be some questions from areas not identified herein;

### General Notes

Documents related to AACE are not part of the course content.

I recommend studying the course Lecture Week content most intently. Study the assignments just very lightly. The information in the course content forms the basis for ALMOST all the questions. There will be one question or so on Meyers Briggs (2%) so make sure you have read through that. There will be as many as a few questions on bidding laws and tendering so make sure you read through those documents. There may be as many as a couple of questions on Sharkworld. You do need to understand critical chain project management;

### Course Content Areas to take particular note of:

Week 1 – Intuition, keeping the team strong and moving it forward together; definition of a project; the goal of a project manager; the history of project management – how scientific management evolves and who have been the major contributors and what they did; project activities and where they line up in the flow of a project; the advantage of being professionally trained in project management; future trends in PM work; difference between PM and manager; stakeholder definition;

Week 2 – how companies are managed; the different types of project management organizational cultures in businesses; the monkey and the banana – why people behave the way they do; selection models – know all of them and have an idea how to apply them;

Week 3 – where project activities fit in the project work flow; leadership concepts; portfolio selection

Week 4 – know all the elements of a project charter; Team work – how to encourage it and what are the trends and strengths; coaching and how to talk to your team; rewards and recognition; all about scope creep;

Week 5 – Scope statements and scope management; scope verification; work breakdown structure; work packages; work breakdown dictionary; project management maturity; responsibility assignment matrix; work authorization; project closeout;

Week 6 – Activity network diagrams – all about them know how to make all calculations; activity estimating; Gantt charts – know everything about these as presented in our material and how to manipulate them; Crashing – understand this thoroughly inc crash cost per day, overhead, direct costs and indirect costs;

Week 7 – How eng firms look at costs; earned value analysis – know this thoroughly as presented in our notes; planned value charts; earned value rules and methods applied to tasks; the learning curve; sunk costs;

Week 9 – Why we study PM; negotiation know all about it as presented; resource leveling – know everything about this as presented in our notes; resource allocation on multiple projects – how these dilemmas are solved; emotional intelligence using exact wording from notes; hierarchy of needs; training and accountability

Week 10 – conflict management and resolution – everything about it in our materials; methods of conflict resolution; the most likely conflicts PMs face; communication models;

Week 11 – Risk management; opportunities; quantitative; qualitative, probability & impact; mitigation strategies – know them all; risk vs amount at stake; how teams come up with risk; probability and consequences of risk; expected monetary value and decision tree; contingency plan vs management plan;

Week 12 – the 5 elements of any contract; obligation to accept lowest bid; bid bonds; know everything about the different types of contracts in our notes; categories of contracts and who has the risk in each case;