Project Management 101
Laying the Foundation for Superior Project Managers

Module 1: Introduction

- Syllabus
- Establish Student Groups (by time zone)
- Course Structure and Case Studies
- Course Requirements and Schedule
- Course Grading
- Instructor Contact Information
- ACEC Policy Links/Contacts
- Expected Student Conduct
- Final Exam Information
- Review of Bibliography
  - Student Background Reports
- Introductory Content
    - The Primary Job of a Project Manager
  - How Do Project Managers Communicate?

Module 2: Project Management Team and Process Management Concepts

- Introduction/Primary Role of Team Managers
- Management Concepts
- Importance of the System/Process
  - Use of Technology
  - Effective Communications
  - Team Approach
  - Cross Training
  - Authority=Responsibility
  - Decision Making to the Lowest Effective Level
- Problems Traced to a Weak or Ineffective Project Management System
- Organization Life Cycle Curve
- Project Delivery Systems
  - System Types
    - Pyramid Approach
    - Departmental Organization

- - - Matrix Management
      - Other Concepts
      - Account Managers
      - Studios
  - Impact on Construction Costs
  - Client Selection of Design Consultants
  - Project Delivery Methods
    - Traditional Straight-Line Method
    - Fast-Track Method
    - Design/ Build Method
  - -Specialized Consultants
    - Project Management Consultants
    - Program Management Consultants
    - Design/Build Firms
    - Construction Managers
      - At Risk
      - Not At Risk
  - Owner/Client Concerns
    - Respect
    - Communication
    - Service
    - Satisfaction
    - Loyalty/Commitment
  - Owner/Client Needs
    - Want to Be Kept Informed
    - Good Cost Control
    - Technical Competence
    - Regular Invoicing
  - Owner/Client Role

Module 3: Planning and Management Concepts for Project Managers

- Long-Range Planning Process-Elements
  - Strategies
  - Implementation Plans
  - Initial Objectives
  - Tactical Plans
- Goal Setting
  - Bottom-Up
  - Pragmatic Compromise
  - Continual
- Decision-Making Management Concepts
- Strategic Project Management Plan

- Elements of a Strategic Project Management Plan
- Items to Consider Under the Plan

Module 4: The Project Team Manager

- Characteristics of Project Team Managers
    - Strong Organizational Ability
    - Generalist
    - Insight
    - Ability to Monitor the Project
    - Communicative
    - Experience
    - Leadership Ability
    - Ability to Make Decisions
- Project Manager Responsibilities
    - Specific Responsibilities
        - Marketing and Continued Contact
        - RFP/RFQ Preparation/Fee Determination and Negotiation
        - Staff Planning and Assembly of the Project Team
        - Managing the Project
        - Quality Management
        - Team Relations
        - Project Status Reporting
        - Billing and Collection
- Role of Project Administrators
- Role of Design Firm Project Managers in the Marketing Process
    - What Facilities Managers Expect of Designer During the Marketing Process
- Cross Training
    - Benefits
- Training Methods
    - Lecture Method
    - Classroom Training
    - Program Learning
    - Group Discussion/Case Studies
    - On-the-Job Training
- Mentoring
- Mentoring Programs
    - Formal
    - Informal
- Sources and Providers (see Bibliography)
- Project Administration
    - Project Notebooks
- Project Management Manuals

- o Development
- o Content

Module 5: Soft Skills

- Time Management
  - o Meeting Management
  - o Other Ideas
- Preparing and Editing Written Materials
- Public Speaking
- Listening Skills
- Successful Negotiating

Module 6: Working With Engineering/Architectural Firms

- Owner/Client Criteria for Selecting A/E Consultants
  - o Experience
  - o Pricing Justification
  - o Project Delivery System
  - o Specific Team Members
  - o Fee for Services
  - o Project Management Manual
- Factors Impacting Traditional A/E Consultants
  - o Why They Limit Their Services
- External Constraints on A/E Designers
- Project Phases and Personnel Responsibilities
  - o Design/Bid/Build Projects
- Project Development Steps
- Understanding Design Firm Costs
- Basic Financial Model for Design Firms
- Profit Planning for Design Firms
  - o Labor
  - o Non labor Costs
  - o Ratios/Multipliers

Module 7: Scoping/Budgeting/Monitoring/Billing:

- Scope Determination
- Scope Management
  - o Scope of Services Planning Format
- Managing Scope Creep and Project Design Change Orders
  - o Work Authorization Form

- o Consultant Work Authorization Form
- Project Budgeting Resources
  - o Methods to Budget Design Projects
- A/E Contract Types
  - o Dividing Contracts
  - o Value Pricing
- Project Cost Plan/Project Budgeting
  - o Direct Personnel Expense (DPE)
  - o Reimbursable Markup
- Monitoring Design Costs
  - o Status Reports
    - ▪ Labor
    - ▪ Expenses
    - ▪ Summary
    - ▪ Software Considerations
- Billing Checklist
  - o Beneficial to Both Client and Designers
- Prompt Payment of Design Consultants by the Prime Consultant
- Controlling Project Design Costs (Summary)
  - o Design Firm Organization
  - o Before Signing a Design Services Contract
  - o Effective Communications
  - o Monitoring Project Progress
  - o Why Projects Run Over Their Design Budget

Module 8: Project Quality/Risk Management/Other Topics

- Concepts: Quality and Risk Management
  - o Red Flag Words
- Quality Assurance Programs
  - o Developing
  - o Organization Plan
  - o Project Manager System
  - o Quality Assurance Development
  - o Insurance and Legal Professionals
- Peer Review Programs
  - o Background
  - o Components
- Value Engineering
  - o Overview
- Commissioning
  - o Background
- Partnering

- - History
  - Uses and Cautions
- Project Closeout
  - Client Satisfaction/Feedback
    - Report Card Form
  - Building Historic Databases
    - Completed Projects File
  - Continued Contact
- Computers in the Construction Industry
  - History of Construction Industry Computer Use
  - Building Information Modeling (BIM)

Module 9: Staffing and Scheduling

- Staffing Issues
  - Responsibility and Authority
  - Delegating Responsibility
  - Cross Training
  - Mentoring
  - Personnel Planning
- Project Scheduling
- Issues in Planning and Scheduling
    - Defining a Successful Project
- Responsibilities of a Project Manager in Preparing a Plan
- Benefits and Limitations of Project Schedule Networks
- Introduction to Planning and Scheduling
- Defining Project Success
  - On-time
  - Within budget
  - Meets the owner's needs
- Purpose of Planning
- Why Schedule
- Major Planning Goals
- What Makes for a Good Schedule?
- Products of a Schedule
- Responsibilities of a Team Manager Regarding Schedules