



## OSPI Model Framework

# Project Management

<b>CIP Code: 520211</b>	<b>Total Framework Hours: 90 Exploratory (adaptable up to 1080)</b>
<b>Career Cluster: Business, Management and Administration</b>	<b>Cluster Pathway: Business Management</b>
<b>Resources and Standards used in Framework Development:</b>	
<b>A Guide to the Project Management Body of Knowledge (PMBOK® Guide) Fourth Edition</b>	

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# C-1 Standard: Introduction to Project Management Course and Project Integration Management

## COMPONENTS AND COMPETENCIES

**Performance Assessments:**

**Students will research Project Management terms**

**Students will work in a group to understand Project Management terms and prepare a presentation to teach this knowledge area to other students in the class.**

**Students will create a graph illustrating an organizational structure, and the impact it has on the project**

**Students will create a poster illustrating project phases**

**Assess and prioritize project goals**

**Create a project organization chart, GANTT chart, and a work breakdown structure (WBS)**

## STANDARDS AND COMPETENCIES

**C=Core A=Advanced.**

**Total Learning Hours for Unit: 8**

C-1.1	Understand purpose and components of project charter
C-1.2	Understand purpose and components of project management plan
C-1.8	Understand the concept of a project and determine types of projects
C-1.9	Describe the elements of a project
C-1.10	Comprehend management areas of project management
C-1.11	Evaluate relationship between project management process groups
C-1.12	Understand vocabulary of project management
C-1.14	Understand the relationship between time and the project life cycle
C-1.15	Graph project phases
C-1.16	Understand project phases
C-1.18	Understand the types of project stakeholders
C-1.19	Explain the relationship between stakeholders and the project
C-1.20	Explain how organizational structure affects the project
C-1.21	Graph different models of organization and the relationship to project coordination
C-1.22	Identify major project management processes and describe how they are interrelated
C-1.23	Compare/contrast how different project management models organize the project management processes
C-1.26	Balance competing demands of scope, time, cost, quality, resources, and risk to produce specified outline
C-1.28	Understand the flow of the organization
C-1.30	Create a GANTT chart
C-1.31	Discuss and define work breakdown structure (WBS)

**SKILLS**

**Leadership:** 2.1 The student will communicate, participate, and advocate effectively in pairs, small groups, teams, and large groups in order to reach common goals.

**Employability:** 1.1 The student will demonstrate the ability to identify, organize, plan, and allocate **resources**. This means that the student is able to demonstrate allocating time, money, materials, space, and staff.

**Relevance to Work:** Project management is a basic skill needed to work successfully with multiple stakeholders, timelines and deliverables.

## C-2 Standard: Personal Time Management

**COMPONENTS AND COMPETENCIES**

**Performance Assessments:**  
**Students will demonstrate use of a personal time management system that includes scheduling, prioritizing, setting SMART goals, and creating a vision or mission statement**  
**Students will create a time management flowchart**

**STANDARDS AND COMPETENCIES**

<b>C=Core A=Advanced</b>		<b>Total Learning Hours for Unit: 10</b>
C-2.1	Understand time management systems	
C-2.2	Create an urgent/important matrix	
C-2.3	Create and prioritize a task list	
C-2.4	Use time management tools (e.g. planner, calendar, online tools, to do list, template, or PDA)	
C-2.5	Write a SMART goal	
C-2.6	Use a time log to evaluate personal time management	
C-2.7	Break down large tasks into action steps	
C-2.8	Write a personal mission or vision statement	
C-2.9	Demonstrate an understanding of the concept of time	

**SKILLS**

**Leadership:** 2.1 The student will communicate, participate, and advocate effectively in pairs, small groups, teams, and large groups in order to reach common goals

**Employability:** 1.1 The student will demonstrate the ability to identify, organize, plan, and allocate **resources**. This means that the student is able to demonstrate allocating time, money, materials, space, and staff.

**Relevance to Work:** Understanding that strong personal planning skills will contribute to higher productivity in organizations

## C-3 Standard: Team Building Skills

### COMPONENTS AND COMPETENCIES

**Performance Assessments:**

**Students will interact in team settings in a manner that demonstrates respect, active listening, group development and effective outcomes.**

**Students will complete personal strength survey, and use communication strategies to effectively interact with those of differing strengths.**

### STANDARDS AND COMPETENCIES

**C=Core A=Advanced**

**Total Learning Hours for Unit: 5**

C-3.1	Demonstrate effective communication in a diverse group setting
C-3.2	Understand group development model, and identify the stages of the model in team situations (performing, storming, norming)
C-3.3	Identify characteristics of an effective team
C-3.4	Identify personal strengths
C-3.5	Recognize the strengths of others
C-3.6	Utilize communication strategies
C-3.7	Demonstrate active listening

### SKILLS

**Leadership:** 2.1 The student will communicate, participate, and advocate effectively in pairs, small groups, teams, and large groups in order to reach common goals

**Employability:** 1.1 The student will demonstrate the ability to identify, organize, plan, and allocate **resources**. This means that the student is able to demonstrate allocating time, money, materials, space, and staff.

**Relevance to Work:** Understanding group dynamics will contribute to higher productivity in organizations.

## C-4 Standard: Project Charters

### COMPONENTS AND COMPETENCIES

**Performance Assessments:**

**In groups, students will select a project manager, and develop project management teams, students will develop:**

- **Project Charter**
- **Outline of a project plan using a template**

### STANDARDS AND COMPETENCIES

**C=Core A=Advanced**

**Total Learning Hours for Unit: 5**

C-4.1	Describe the purpose of the project
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C-4.2	Justify the project
C-4.3	Name the project
C-4.4	Identify project stakeholders
C-4.5	Define stakeholders' needs and requirements
C-4.6	Identify and list the final deliverables of the project
C-4.11	Assumptions, constraints, legal or organizational requirements are identified and documented
C-4.12	Set up project review process
C-4.13	Outline project scope, schedule, budget

### **SKILLS**

**Leadership:** 2.1 The student will communicate, participate, and advocate effectively in pairs, small groups, teams, and large groups in order to reach common goals

**Employability:** 1.1 The student will demonstrate the ability to identify, organize, plan, and allocate **resources**. This means that the student is able to demonstrate allocating time, money, materials, space, and staff.

**Relevance to Work:** Project management contributes to the success of businesses.

## C-5 Standard: Project Scope Management

### **COMPONENTS AND COMPETENCIES**

**Performance Assessments:**

**Students will create a detailed description of a project's scope, analyze the requirements, and determine feasibility of project. Tools, techniques, and supporting documents will be appropriately identified and used as they relate to the project. Project deliverables will be identified and specified, with customer/stakeholder verification.**

### **STANDARDS AND COMPETENCIES**

**C=Core A=Advanced**

**Total Learning Hours for Unit: 10**

C-5.1	Collect requirements of project from customers/stakeholders
C-5.3	Research requirements, identify constraints, and develop measurable and testable outputs
C-5.4	Develop detailed description of the project and deliverables
C-5.5	Develop plan to assess how requirements will be documented and measured throughout the project
C-5.6	Break down the project deliverable into smaller, manageable components or tasks, and create a work breakdown schedule (WBS)
C-5.7	Define and verify scope by reviewing deliverables and project schedule with customer or stakeholders and verify feasibility
C-5.8	Control scope by monitoring the time and resources used by the project, and controlling change
C-5.9	Project success criteria is agreed upon among stakeholders

### **SKILLS**

**Leadership:** 2.1 The student will communicate, participate, and advocate effectively in pairs, small groups, teams, and large groups in order to reach common goals

**Employability:** 1.1 The student will demonstrate the ability to identify, organize, plan, and allocate **resources**. This means that the student is able to demonstrate

allocating time, money, materials, space, and staff.

**Relevance to Work:** Determining and communicating a realistic scope is integral to the successful completion of projects.

## C-6 Standard: Project Time Management

### COMPONENTS AND COMPETENCIES

#### Performance Assessments:

**Students will define project activities and create a document (e.g. story board, GANTT chart, graphic) outlining the project schedule including milestones, and all activities including descriptions. Developed schedule will be monitored for progress and accuracy, and determinations will be made to adjust schedule as the project progresses based on the actual completion of scheduled activities.**

### STANDARDS AND COMPETENCIES

**C=Core A=Advanced**

**Total Learning Hours for Unit: 10**

C-6.1	Define activities by breaking down the project deliverables into steps
C-6.2	Identify tools and techniques to define activities and select those appropriate to a project
C-6.3	Create a list of activities that includes the attributes of the activities
C-6.4	Determine project milestones by determining major accomplishments of the project
C-6.6	Determine order of activities
C-6.7	Refer to project scope statement to verify schedule is in alignment
C-6.8	Diagram and define precedence relationships (e.g. finish to start, finish to finish, start to start, and start to finish)
C-6.9	Identify, analyze and schedule for dependencies in the project to determine and calculate the critical path
C-6.13	Adapt schedule to availability of resources
C-6.14	Estimate activity durations by assessing the time needed to complete activities
C-6.15	Develop schedule by compiling all activity information and integrating it into a reasonable timeline
C-6.16	Monitor, identify and report current status of project schedule
C-6.17	Determine and manage schedule changes
A-6.1	Use tools to monitor and control schedule
A-6.2	Use tools to determine resources

### SKILLS

**Leadership:** 2.1 The student will communicate, participate, and advocate effectively in pairs, small groups, teams, and large groups in order to reach common goals

**Employability:** 1.1 The student will demonstrate the ability to identify, organize, plan, and allocate **resources**. This means that the student is able to demonstrate allocating time, money, materials, space, and staff.

**Relevance to Work:** Effective scheduling is paramount to a smooth workflow and on time completion.

## C-7 Standard: Project Cost Management

### COMPONENTS AND COMPETENCIES

**Performance Assessments:**

**Students will estimate and develop a budget for a project. Documents and tools will be used to present budget performance to stakeholders. Students will forecast budget outcomes, and summarize budget expenditures. Budget vs. actual expenditure will be analyzed at completion.**

#### STANDARDS AND COMPETENCIES

**C=Core A=Advanced**

**Total Learning Hours for Unit: 5**

C-7.2	Estimate internal and external costs associated with project based on parameters of project, and resources used or needed
C-7.3	Use tools and techniques to accurately estimate costs
C-7.4	Determine return on investment for project
C-7.5	Compare/Contrast estimating strategies and select appropriate strategy for situation
C-7.6	Budget for uncertainty (contingency)
C-7.8	Determine team's confidence in accuracy of estimated costs (expected variance)
C-7.9	Determine budget based on project needs
C-7.10	Determine appropriate documentation for budget expenditures and select documents to use for project
C-7.11	Review existing models of projects with similar budget activities
C-7.12	Control costs by aligning project spending to project budget
C-7.14	Create a forecast to determine cost overruns or savings
C-7.15	Analyze budget performance
C-7.16	Effective presentation and communication methods are selected and used to communicate budget information to stakeholders
A-7.1	Use tools and techniques to monitor budget of project

#### SKILLS

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**Employability:** 1.1 The student will demonstrate the ability to identify, organize, plan, and allocate **resources**. This means that the student is able to demonstrate allocating time, money, materials, space, and staff.

**Relevance to Work:** Cost control is an important aspect of business.

## C-8 Standard: Project Quality Management

### COMPONENTS AND COMPETENCIES

**Performance Assessments:**  
**Define quality assurance standards**  
**Define quality control metrics**

**STANDARDS AND COMPETENCIES**

<b>C=Core A=Advanced</b>		<b>Total Learning Hours for Unit: 5</b>
C-8.1	Plan quality standards and benchmarks	
C-8.2	Compare/contrast quality management strategies	
C-8.3	Determine criteria for measuring quality	
C-8.4	Identify good practices and shortcomings in project, and in similar projects	
C-8.5	Audit product and processes for quality and improvement, and implement changes if needed	
C-8.6	Compare/contrast tools for quality control	
C-8.7	Develop and utilize quality control documentation	

**SKILLS**

**Leadership:** 2.1 The student will communicate, participate, and advocate effectively in pairs, small groups, teams, and large groups in order to reach common goals

**Employability:** 1.1 The student will demonstrate the ability to identify, organize, plan, and allocate **resources**. This means that the student is able to demonstrate allocating time, money, materials, space, and staff.

**Relevance to Work:** Quality assurance is integral in meeting customer needs.

## C-9 Standard: Project Human Resource Management

**COMPONENTS AND COMPETENCIES**

**Performance Assessments:**  
**Create a human resources plan that identifies the competencies required of personnel in the project team**  
**Create Responsibility Assignment Matrix for Project**  
**Develop an evaluation appropriate to the project**

**STANDARDS AND COMPETENCIES**

<b>C=Core A=Advanced</b>		<b>Total Learning Hours for Unit: 5</b>
C-9.1	Develop human resource plan	
C-9.2	Determine team members individual roles and responsibilities to project	
C-9.3	Determine skill sets of team members	
C-9.4	Create organization chart	
C-9.5	Determine needs of team members (e.g. training, recognition, compliance, safety)	
C-9.6	Determine team norms for project participation	
C-9.7	Understand project evaluation vs. personal evaluation	
C-9.8	Compare/contrast different methods of forming project teams	



C-9.9	Determine staff assignments, calendars
C-9.11	Manage project team
C-9.14	Practice conflict management
C-9.15	Determine, implement, and conduct method of performance appraisal for project team members
C-9.17	Identify and practice effective interpersonal skills
C-9.18	Identify and practice effective decision making skills
C-9.19	Adapt to staffing changes
C-9.20	Individual project roles are defined, documented, communicated, and agreed upon
	Complete a responsibility assignment matrix (RAM)
<b>SKILLS</b>	
<b>Leadership:</b> 2.1 The student will communicate, participate, and advocate effectively in pairs, small groups, teams, and large groups in order to reach common goals	
<b>Employability:</b> 1.1 The student will demonstrate the ability to identify, organize, plan, and allocate <b>resources</b> . This means that the student is able to demonstrate allocating time, money, materials, space, and staff.	
<b>Relevance to Work:</b> Effective management of human resources contributes to the success of organizations	

## C-10 Standard: Project Communications Management

<b>COMPONENTS AND COMPETENCIES</b>	
<b>Performance Assessments:</b> Students will plan the communication process and prepare material appropriate to the project situation Maintain a portfolio of all communication used in a project documenting planning/actions taken/results	
<b>STANDARDS AND COMPETENCIES</b>	
<b>C=Core A=Advanced</b>	<b>Total Learning Hours for Unit: 5</b>
C-10.2	Create a stakeholder register including level of involvement, assessment, and contact information
C-10.3	Develop stakeholder management strategy
C-10.4	Understand appropriate business communication channels and practice appropriate use
C-10.9	Develop presentation techniques that communicate project information effectively
C-10.10	Develop project reports, project presentations, project records, feedback from stakeholders, and lessons learned
C-10.12	Differentiate types of communication based on stakeholder needs
C-10.18	Identify target market for communication and their location
C-10.20	Manage meetings (prepare, conduct, report, and follow up on actions as a result of a meeting)

### SKILLS

**Leadership:** 2.1 The student will communicate, participate, and advocate effectively in pairs, small groups, teams, and large groups in order to reach common goals

**Employability:** 1.1 The student will demonstrate the ability to identify, organize, plan, and allocate **resources**. This means that the student is able to demonstrate allocating time, money, materials, space, and staff.

**Relevance to Work:** Effective communication contributes to the success of organizations.

## C-11 Standard: Project Risk Management

### COMPONENTS AND COMPETENCIES

**Performance Assessments:**

**Students will identify and assess the risks of a project, develop a risk response plan and have it approved and communicated.**

**Students will complete a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis**

**Create and maintain a risk register for a project**

### STANDARDS AND COMPETENCIES

**C=Core A=Advanced**

**Total Learning Hours for Unit: 5**

C-11.1	Define a project risk and describe benefits/drawbacks of risk
C-11.2	Analyze and assign a risk rating to deliverables based on level of uncertainty
C-11.4	Complete a SWOT analysis
C-11.6	Define countermeasures to reduce risk, and assign team member to be accountable for each countermeasure that is chosen
C-11.7	Create risk probability and impact assessment and matrix
C-11.8	Create and maintain a risk register
C-11.9	Rank and categorize risk
C-11.11	Plan Risk Responses
C-11.12	Monitor and Control Risks

### SKILLS

**Leadership:** 2.1 The student will communicate, participate, and advocate effectively in pairs, small groups, teams, and large groups in order to reach common goals

**Employability:** 1.1 The student will demonstrate the ability to identify, organize, plan, and allocate **resources**. This means that the student is able to demonstrate allocating time, money, materials, space, and staff.

**Relevance to Work:** Risk is a reality in the workplace, and risk analysis is important to project success.

## C-12 Standard: Project Procurement Management

### COMPONENTS AND COMPETENCIES

**Performance Assessments:**

**Students will identify and plan for procurements in a project, including evaluation of sources.**

**Students will review a contract and describe the terms and penalties.**

**STANDARDS AND COMPETENCIES**

**C=Core A=Advanced**

**Total Learning Hours for Unit: 5**

C-12.1	Identify and plan procurements
C-12.2	Compare/contrast contract types
C-12.3	Demonstrate understanding of contract terms, including penalties
C-12.4	Develop, identify and use selection criteria including product and source
C-12.5	Evaluate proposals or bids
C-12.6	Create procurement documentation, correspondence, and payment schedules and requests
C-12.7	Complete a make/buy analysis

**SKILLS**

**Leadership:** 2.1 The student will communicate, participate, and advocate effectively in pairs, small groups, teams, and large groups in order to reach common goals

**Employability:** 1.1 The student will demonstrate the ability to identify, organize, plan, and allocate **resources**. This means that the student is able to demonstrate allocating time, money, materials, space, and staff.

**Relevance to Work:** Procuring needed resources in a cost-effective and timely manner contributes to the success of organizations

## C-13 Standard: Project Management Process Groups and final presentations

**COMPONENTS AND COMPETENCIES**

**Performance Assessments:**

**Students will demonstrate understanding of project management by working in a project management team to complete a project .**

**Students will work together to create a project team that will clarify the expectations of the stakeholders in a new project, tempering expectations with realistic outcomes to develop a project charter, project plan, assign team roles, and a schedule for the project.**

**Students will implement a project plan and monitor the project, communicating changes in project risk, schedule, budget, and outcome to stakeholders.**

**Students will complete a project after the results have been delivered and compile project documentation, evaluate stakeholder satisfaction, and determine experience gained and lessons learned from the project.**

**Create final project report.**

**STANDARDS AND COMPETENCIES**

<b>C=Core A=Advanced</b>		<b>Total Learning Hours for Unit: 15</b>
C-13.1	Initiate process	
C-13.2	Plan process	
C-13.3	Execute process	
C-13.4	Monitor and control process	
C-13.5	Close process	
<b>SKILLS</b>		
<b>Leadership:</b> 2.1 The student will communicate, participate, and advocate effectively in pairs, small groups, teams, and large groups in order to reach common goals.		
<b>Employability:</b> 1.1 The student will demonstrate the ability to identify, organize, plan, and allocate <b>resources</b> . This means that the student is able to demonstrate allocating time, money, materials, space, and staff.		
<b>Relevance to Work:</b> Project management is a necessary part of business across industries.		

## C-14 Standard: Project Management Career Exploration

<b>COMPONENTS AND COMPETENCIES</b>		
<p><b>Performance Assessments:</b>  <b>Research career opportunities in Project Management across industry sectors</b>  <b>Create a career progression ladder</b></p>		
<b>STANDARDS AND COMPETENCIES</b>		
<b>C=Core A=Advanced</b>		<b>Total Learning Hours for Unit: 2</b>
C-14.1	Use online resources to research career information related to project management	
C-14.2	Understand the outlook and industry growth in project management	
C-14.3	Understand project management opportunities across career clusters	
C-14.4	Research post-secondary training related to project management	
C-14.5	Identify project management certifications, their benefit, and the requirements to obtain them.	
<b>SKILLS</b>		
<b>Leadership:</b> 2.1 The student will communicate, participate, and advocate effectively in pairs, small groups, teams, and large groups in order to reach common goals		
<b>Employability:</b> 1.1 The student will demonstrate the ability to identify, organize, plan, and allocate <b>resources</b> . This means that the student is able to demonstrate allocating time, money, materials, space, and staff.		
<b>Relevance to Work:</b> Project management is a necessary part of business across industries.		