Project Management Professional (PMP)®

Examination Content Outline

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†Revised August 2011

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INTRODUCTION

The Project Management Institute (PMI®) offers a professional credential for project managers, known as the Project Management Professional (PMP®). PMI's professional credentialing examination development processes stand apart from other project management certification examination development practices. PMI aligns its process with certification industry best practices, such as those found in the *Standards for Educational and Psychological Testing*. The PMP credential is also accredited against the internationally recognized ISO 17024 standard.[1]

A key component of this process is that organizations wishing to offer valid and reliable professional credentialing examinations are directed to use a role delineation study (RDS) as the basis for the creation of the examination. This process utilizes knowledge and task driven guidelines to assess the practitioners' competence, and determine the level of salience, criticality, and frequency of each of the knowledge, tasks, and skills required to perform to the industry-wide standard in the role of a project manager.

The role delineation study ensures the validity of an examination. Validation assures the outcome of the exam is in fact measuring and evaluating appropriately the specific knowledge and skills required to function as a project management professional. Thus, the role delineation study guarantees that each examination validly measures all elements of the project management profession in terms of real settings.

PMP credential holders can be confident that their professional credential has been developed according to best practices of test development and based upon input from the practitioners who establish those standards. Please see Appendix A for a detailed description of the process.

The PMP examination is a vital part of the activities leading to earning a professional credential, thus it is imperative that the PMP examination reflect accurately the practices of the project management professional. All the questions on the examination have been written and extensively reviewed by qualified PMP credential holders and tracked to at least two academic references. These questions are mapped against the *PMP Examination Content Outline* to ensure that an appropriate number of questions are in place for a valid examination.

PMI retained Professional Examination Service (PES) to develop the global *PMP Examination Content Outline*. Since 1941, PES has provided a full range of assessment and advisory services to organizations across a broad range of professions, in support of professional licensure and certification, training, and continuing professional education. PES is dedicated to promoting the public welfare through credentialing as a mission-driven, not-for-profit organization.

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[1] Published jointly by the American Education Research Association, National Council on Measurement in Education and American Psychological Association. The PMP is also accredited by the American National Standards Institutes (ANSI) against the internationally recognized ISO/IEC 17024 standard: *Conformity assessment—General requirements for bodies operating certification of persons.*

Finally, while the *PMP Examination Content Outline* and the *PMBOK® Guide* have commonalities, it is important to note that those involved in the study described previously were not bound by the *PMBOK® Guide*. They were charged with defining the role of individuals leading and directing projects, and using their experience and pertinent resources to help in this task.

Although many of the domains, tasks, knowledge, and skills outlined by the *PMP Examination Content Outline* are also covered by the *PMBOK® Guide*, there are some that are unique to the *PMP Examination Content Outline*. Candidates studying for the examination will certainly want to include the current edition of the *PMBOK® Guide* as one of their references, and would be well advised to read other current titles on project management. An excellent source of these titles, utilized in PMP examination development, is found in the PMI member resource eReads and Reference.

EXAM CONTENT OUTLINE

The following table identifies the proportion of questions from each domain that will appear on the examination. These percentages are used to determine the number of questions related to each domain and task that should appear on the multiple-choice format examination.

Domain	Percentage of Items on Test
I. Initiating the Project	13 %
II. Planning the Project	24 %
III. Executing the Project	30 %
IV. Monitoring and Controlling the Project	25 %
V. Closing the Project	8 %
Total	**100%**

DOMAINS, TASKS, AND KNOWLEDGE AND SKILL STATEMENTS

This section of the report contains the domains, tasks, and knowledge and skill statements as defined by the role delineation study.

Each domain contains tasks that are measured through the PMP certification progress. In addition, the domain contains knowledge and skills, which are required to competently perform these tasks. There are also cross-cutting knowledge and skills, which are used in multiple domains and tasks.

I.   **Initiating the Project**

II.   **Planning the Project**

III.   **Executing the Project**

IV.   **Monitoring and Controlling the Project**

V.   **Closing the Project**

PERFORMANCE DOMAIN I: INITIATING THE PROJECT

Domain I	Initiating the Project – 13 %
Task 1	**Perform project assessment based upon available information and meetings with the sponsor, customer, and other subject matter experts, in order to evaluate the feasibility of new products or services within the given assumptions and/or constraints.**
Task 2	**Define the high-level scope of the project based on the business and compliance requirements, in order to meet the customer's project expectations.**
Task 3	**Perform key stakeholder analysis using brainstorming, interviewing, and other data-gathering techniques, in order to ensure expectation alignment and gain support for the project.**
Task 4	**Identify and document high-level risks, assumptions, and constraints based on current environment, historical data, and/or expert judgment, in order to identify project limitations and propose an implementation approach.**
Task 5	**Develop the project charter by further gathering and analyzing stakeholder requirements, in order to document project scope, milestones, and deliverables.**
Task 6	**Obtain approval for the project charter from the sponsor and customer (if required), in order to formalize the authority assigned to the project manager and gain commitment and acceptance for the project.**
	Knowledge and Skills:[A] • Cost-benefit analysis • Business case development • Project selection criteria (for example, cost, feasibility, impact) • Stakeholder identification techniques • Risk identification techniques • Elements of a project charter

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[A] In addition to domain-specific knowledge and skills, these specifications include a set of cross-cutting knowledge and skills used in multiple domains. The cross-cutting knowledge and skills list is found in the section on Cross-Cutting Knowledge and Skills.

PERFORMANCE DOMAIN II: PLANNING THE PROJECT

Domain II	Planning the Project – 24%
Task 1	Assess detailed project requirements, constraints, and assumptions with stakeholders based on the project charter, lessons learned from previous projects, and the use of requirement-gathering techniques (e.g., planning sessions, brainstorming, focus groups), in order to establish the project deliverables.
Task 2	Create the work breakdown structure with the team by deconstructing the scope, in order to manage the scope of the project.
Task 3	Develop a budget plan based on the project scope using estimating techniques, in order to manage project cost.
Task 4	Develop a project schedule based on the project timeline, scope, and resource plan, in order to manage timely completion of the project.
Task 5	Develop a human resource management plan by defining the roles and responsibilities of the project team members in order to create an effective project organization structure and provide guidance regarding how resources will be utilized and managed.
Task 6	Develop a communication plan based on the project organization structure and external stakeholder requirements, in order to manage the flow of project information.
Task 7	Develop a procurement plan based on the project scope and schedule, in order to ensure that the required project resources will be available.
Task 8	Develop a quality management plan based on the project scope and requirements, in order to prevent the occurrence of defects and reduce the cost of quality.
Task 9	Develop a change management plan by defining how changes will be handled, in order to track and manage changes.
Task 10	Plan risk management by developing a risk management plan, and identifying, analyzing, and prioritizing project risks in the risk register and defining risk response strategies, in order to manage uncertainty throughout the project life cycle.†
Task 11	Present the project plan to the key stakeholders (if required), in order to obtain approval to execute the project.

Task 12	Conduct a kick-off meeting with all key stakeholders, in order to announce the start of the project, communicate the project milestones, and share other relevant information.
	Knowledge and Skills:[B] - Requirements gathering techniques - Work breakdown structure (WBS) tools and techniques - Time, budget, and cost estimation techniques - Scope management techniques - Resource planning process - Workflow diagramming techniques - Types and uses of organization charts - Elements, purpose, and techniques of project planning - Elements, purpose, and techniques of communications planning - Elements, purpose, and techniques of procurement planning - Elements, purpose, and techniques of quality management planning - Elements, purpose, and techniques of change management planning - Elements, purpose, and techniques of risk management planning

† This task was updated in August 2011 as a result of feedback from the project management community and validated by the PMP RDS Task Force and Certification Governance Council (CGC).

[B] In addition to domain-specific knowledge and skills, these specifications include a set of cross-cutting knowledge and skills used in multiple domains. The cross-cutting knowledge and skills list is found in the section on Cross-Cutting Knowledge and Skills.

PERFORMANCE DOMAIN III: EXECUTING THE PROJECT

Domain III	Executing the Project – 30 %
Task 1	**Obtain and manage project resources including outsourced deliverables by following the procurement plan, in order to ensure successful project execution.**
Task 2	**Execute the tasks as defined in the project plan, in order to achieve the project deliverables within budget and schedule.**
Task 3	**Implement the quality management plan using the appropriate tools and techniques, in order to ensure that work is being performed according to required quality standards.**
Task 4	**Implement approved changes according to the change management plan, in order to meet project requirements.**
Task 5	**Implement approved actions and follow the risk management plan and risk register, in order to minimize the impact of negative risk events on the project.†**
Task 6	**Maximize team performance through leading, mentoring, training, and motivating team members.**
	Knowledge and Skills:[C] • Project monitoring tools and techniques • Elements of a statement of work • Interaction of work breakdown structure elements within the project schedule • Project budgeting tools and techniques • Quality standard tools • Continuous improvement processes

† This task was updated in July 2011 as a result of feedback from the project management community and validated by the PMP RDS Task Force and Certification Governance Council (CGC).

[C] In addition to domain-specific knowledge and skills, these specifications include a set of cross-cutting knowledge and skills used in multiple domains. The cross-cutting knowledge and skills list is found in the section on Cross-Cutting Knowledge and Skills.

PERFORMANCE DOMAIN IV:
MONITORING AND CONTROLLING THE PROJECT

Domain IV	Monitoring and Controlling the Project – 25 %
Task 1	Measure project performance using appropriate tools and techniques, in order to identify and quantify any variances, perform approved corrective actions, and communicate with relevant stakeholders.
Task 2	Manage changes to the project scope, schedule, and costs by updating the project plan and communicating approved changes to the team, in order to ensure that revised project goals are met.
Task 3	Ensure that project deliverables conform to the quality standards established in the quality management plan by using appropriate tools and techniques (e.g. testing, inspection, control charts), in order to satisfy customer requirements.
Task 4	Update the risk register and risk response plan by identifying any new risks, assessing old risks, and determining and implementing appropriate response strategies, in order to manage the impact of risks on the project.
Task 5	Assess corrective actions on the issue register and determine next steps for unresolved issues by using appropriate tools and techniques in order to minimize the impact on project schedule, cost, and resources.
Task 6	Communicate project status to stakeholders for their feedback, in order to ensure the project aligns with business needs.
	Knowledge and Skills:[D] • Performance measurement and tracking techniques (for example, EV, CPM, PERT) • Project control limits (for example, thresholds, tolerance) • Project performance metrics (for example, efforts, costs, milestones) • Cost analysis techniques • Variance and trend analysis techniques • Project plan management techniques • Change management techniques • Integrated change control processes

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[D] In addition to domain-specific knowledge and skills, these specifications include a set of cross-cutting knowledge and skills used in multiple domains. The cross-cutting knowledge and skills list is found in the section on Cross-Cutting Knowledge and Skills.

	• Risk identification and analysis techniques
	• Risk response techniques (for example, transference, mitigation, insurance, acceptance)
	• Problem solving techniques (including root cause analysis)
	• Reporting procedures

PERFORMANCE DOMAIN V: CLOSING THE PROJECT

Domain V	Closing the Project – 8 %
Task 1	Obtain final acceptance of the project deliverables by working with the sponsor and/or customer, in order to confirm that project scope and deliverables were met.
Task 2	Transfer the ownership of deliverables to the assigned stakeholders in accordance with the project plan, in order to facilitate project closure.
Task 3	Obtain financial, legal, and administrative closure using generally accepted practices, in order to communicate formal project closure and ensure no further liability.
Task 4	Distribute the final project report including all project closure-related information, project variances, and any issues, in order to provide the final project status to all stakeholders.
Task 5	Collate lessons learned through comprehensive project review, in order to create and/or update the organization's knowledge base.
Task 6	Archive project documents and material in order to retain organizational knowledge, comply with statutory requirements, and ensure availability of data for potential use in future projects and internal/external audits.
Task 7	Measure customer satisfaction at the end of the project by capturing customer feedback, in order to assist in project evaluation and enhance customer relationships.
	Knowledge and Skills:[E] • Contract closure requirements • Basic project accounting principles • Close-out procedures • Feedback techniques • Project review techniques • Archiving techniques and statutes • Compliance (statute/organization) • Transition planning techniques

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[E] In addition to domain-specific knowledge and skills, these specifications include a set of cross-cutting knowledge and skills used in multiple domains. The cross-cutting knowledge and skills list is found in the section on Cross-Cutting Knowledge and Skills.

CROSS-CUTTING KNOWLEDGE AND SKILLS

All Domains	Cross-Cutting Knowledge and Skills
	• Active listening • Brainstorming techniques • Conflict resolution techniques • Cultural sensitivity and diversity • Data gathering techniques • Decision making techniques • Facilitation • Information management tools, techniques, and methods • Leadership tools and techniques • Negotiating • Oral and written communication techniques, channels, and applications • *PMI's Code of Ethics and Professional Conduct* • Presentation tools and techniques • Prioritization/time management • Problem-solving tools and techniques • Project management software • Relationship management • Stakeholder impact analysis • Targeting communications to intended audiences (for example, team, stakeholders, customers) • Team motivation methods

APPENDIX A: ROLE DELINEATION STUDY (RDS) PROCESS

Defining the Responsibilities

The first step in developing a certification examination is to define the responsibilities of the recipients of the credential. It must be known what the individuals who lead and direct projects actually do on the job *before* a content-valid test can be developed. A valid examination draws questions from every important area of the profession and specifies that performance areas (domains) considered more important, critical, and relevant be represented by more questions on the examination. Defining the role of individuals leading and directing projects occurs in two major phases: one in which individuals currently in the role define the responsibilities and another in which the identified responsibilities are validated on a global scale.

Beginning in 2009, PMI commissioned a global role delineation Study (RDS) for the PMP credential. The RDS process was led by a steering committee, representing PMI's Certification Governance structure. A project task force comprised of project managers was responsible for the conduct of work on the project, with oversight from the steering committee. The task force represented every geographic area of the globe and diversity in industry, job position, and experience. Several other groups contributed to the formation and shaping of the RDS process, including representatives from organizations that utilize project management for success, academic representatives, and Registered Education Providers (R.E.P.s). Project managers were also responsible for the independent reviews of the work of the task force and piloting the information before surveying a larger sample of project managers.

Study participants, working under the direction of the Professional Education Service (PES), reached consensus on the performance domains, a broad category of duties and responsibilities that define the role, as well as the tasks required for competence performance and the knowledge/skills needed to perform those tasks.

Validating the Responsibilities Identified by the Panelists

In order to ensure the validity of the study and content outline developed by the panels, a survey requesting feedback on the panel's work was sent to project management practitioners throughout the world. Surveys were distributed globally to thousands of project managers around the world. PMI received a robust set of responses to the survey, with participants from 98 countries and representing every major industry. This provided PMI with the statistical significance from which to draw conclusions about the criticality for competent performance and frequency of the tasks. Practitioners also rated the knowledge/skills on how essential they were to their work as project managers and when they were acquired.

Developing a Plan for the Test

Based on respondent ratings, an examination blueprint, clarifying exactly how many questions from each domain and task should be on the examination, was developed. Those domains and tasks that were

rated as most important, critical, and relevant by survey respondents would have the most questions devoted to them on the examination.

Results of the study indicated that the 175 scorable questions on the test should be distributed among the domains as shown in the following table. The remaining 25 questions will be dispersed throughout the domains as pretest questions and will not count in the candidates' scores. The pretest items allow PMI to monitor the question performance better, prior to including the questions in the final databank of test questions.

Domains	% of Items / Domain
1. Initiating the Project	13%
2. Planning the Project	24%
3. Executing the Project	30%
4. Monitoring and Controlling the Project	25%
5. Closing the Project	8%
Total Number of Scored Questions	175
Total Number of Unscored (Pretest) Questions	25
Total Number of Questions	200

Making project management indispensable for business results.