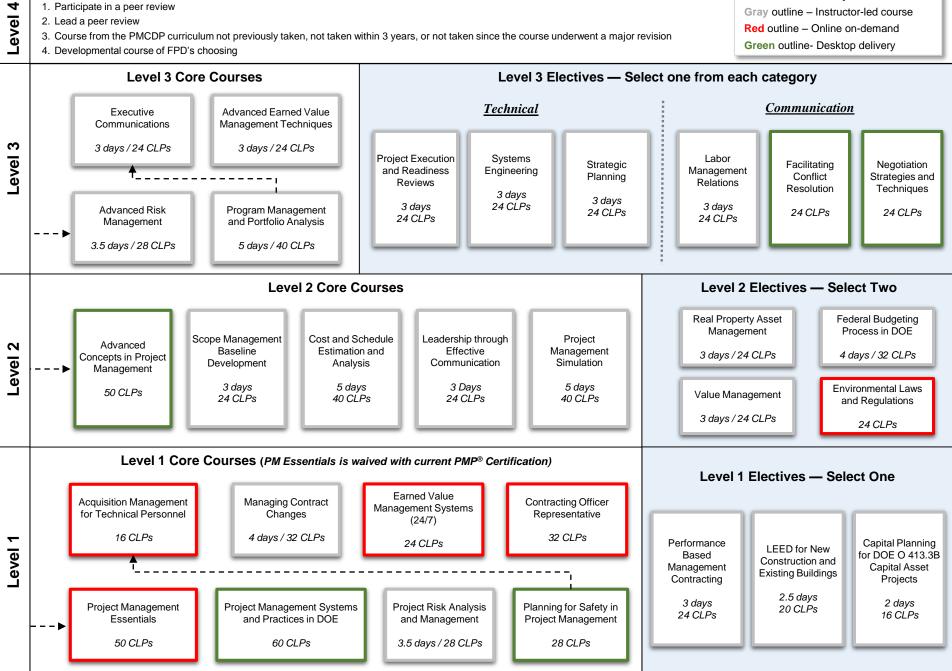
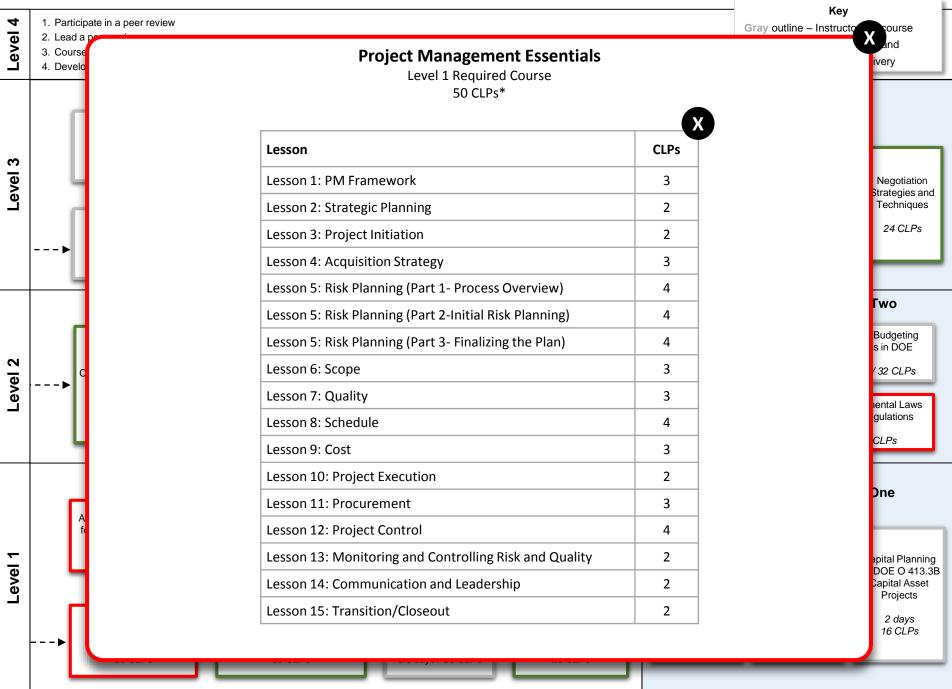
PMCDP Curriculum Learning Map – Updated May 4, 2016

Key



PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a p 3. Course **Project Management Essentials** ivery 4. Develo Level 1 Required Course 50 CLPs\* In this course, participants learn about the primary concepts of project management and are introduced to best practices in project management from Federal agencies and the private sector. This introductory course focuses on four major aspects of project management: The discipline of project management; Project planning; Teambuilding and effective Level leadership; and Project execution. Negotiation Strategies and Techniques Based on the Project Management Institute's Project Management Body of Knowledge (PMBOK® Guide) Fifth edition and J. Davidson Frame's, The New Project Management, 2nd Edition, students will gain an understanding of how to apply this 24 CLPs knowledge to their current DOE projects, and identify ways to incorporate best practices. Various Federal guides and manuals will be referenced throughout the course. The course is presented at an intermediate level of expertise similar to what would be expected of an accredited graduate level college course. Intended Audience: Prospective Level 1 Federal Project Directors, DOE Program Managers, IPT members assigned to Γwο projects (including matrixed personnel). Budgeting Course Format: Online on-demand\* s in DOE **Equivalent Courses:** / 32 CLPs Level PMP Certification- If you are PMP certified, you do not need to take Project Management Essentials. nental Laws gulations **FPM 101** CLPs **FPM 120** Dne \*Note: You may also take each lesson individually and earn continuous learning points for each lesson. pital Planning DOE O 413.3B Click here to view the Capital Asset CLPs for each lesson Projects 2 days 16 CLPs

## PMCDP Curriculum Learning Map – Updated May 4, 2016



PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a p 3. Course **Project Management Systems and Practices in DOE** ivery 4. Develo Level 1 Required Course 60 CLPs This course is designed to instruct participants in the specific project management systems and practices required by DOE Order 413.3b for all capital asset projects in the Department. The course also explains the specific roles and responsibilities of a Federal Project Director in managing a capital asset project in DOE. The course is organized around the processes Level Negotiation specified in DOE Order 413.3b and the associated Guides 413.3-1 through 413.3-19. Participants will learn how to manage Strategies and the critical decision process in the Order as well as other requirements necessary to be a Federal Project Director at DOE, Techniques including the federal budget process; NEPA and other environmental, safety and health laws; and understanding of DOEP 24 CLPs QQ field relations and Lead Program Secretarial Officers (LPSOs). This course is not a general overview of project management; therefore, it is highly recommended that participants take Project Management Essentials prior to taking this course. This course is presented at an intermediate level of expertise similar to what would be expected of an accredited graduate level college course. Two Intended Audience: Prospective Level 1 Federal Project Directors, DOE Program Managers, IPT members assigned to Budgeting projects (including matrixed personnel). This is a Level 1 core course for certification in the Project Management Career s in DOE Development Program (PMCDP). Level / 32 CLPs Course Format: This course is delivered via Adobe Connect in a series of 11 webinars over a period of 7 weeks. Webinars are held twice weekly for 2 hours each. nental Laws gulations **Equivalent Courses:** CLPs • None **CHRIS Code:** 001024 Dne apital Planning DOE O 413.3B Capital Asset Projects 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a po 3. Course **Project Risk Analysis and Management** ivery 4. Develo Level 1 Required Course 3.5 days / 28 CLPs This course is designed to prepare Federal Program or Project Managers to: Determine project risks and develop risk management and mitigation strategies; Level Determine at which points in a project life cycle risk analyses should be performed; Negotiation Strategies and Evaluate potential risk probability and consequences; Techniques Determine risk factors; 24 CLPs Select risk management or mitigation strategies; and Develop a risk management plan. Participants also acquire the skills that enable them to: Γwο Assign risk responsibility between Federal agencies and contractors; Budgeting Determine appropriate project cost and schedule contingencies for identified risks; s in DOE Determine appropriate project management and controls tools to assist in managing identified risks, and; Level / 32 CLPs Evaluate project Estimates at Completion (EAC) and remaining contingencies to determine adequacy of funds. ental Laws Intended Audience: Prospective Level 1 Federal Project Directors, DOE Program Managers, and IPT members assigned to gulations projects (including matrixed personnel). Other members of the acquisition workforce may wish to take this course for **CLPs** continuing education credit. **Course Format:** 3.5 day Instructor-led classroom delivery Dne **Equivalent Courses:**  None **CHRIS Code: 001033** apital Planning **DOE O 413.3B** Capital Asset Projects 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a p and 3. Course **Planning for Safety in Project Management** ivery 4. Develo Level 1 Required Course 25 CLPs This course is designed to provide DOE Federal Project Directors with the knowledge needed to clearly define and carry out integrated safety management and quality management. Additionally, it provides participants with the necessary information to ensure that all DOE projects comply with DOE standards of safety. The main objective of this course is to Level prepare the participant to effectively apply safety management requirements throughout the project acquisition life cycle. Negotiation Strategies and Particular emphasis is given to the planning and design phases where application of a Failure Mode and Effects Analysis Techniques should identify potential hazards and mitigation strategies. Using a case study, this process examines nuclear, 24 CLPs environmental, and worker safety issues in a representative project. Intended Audience: Prospective Level 1 Federal Project Directors, DOE Program Managers, IPT members assigned to projects (including matrixed personnel). Course Format: This course is delivered via Adobe Connect in a series of four 2-hour live webinars over a period of 4 Γwο weeks. These webinars are complemented with 6 self-paced lessons, homework assignments, a case study and group Budgeting presentation. s in DOE **Equivalent Courses:** Level / 32 CLPs None nental Laws **CHRIS Code: 001035** gulations CLPs Dne apital Planning DOE O 413.3B Capital Asset Projects 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a p 3. Course **Acquisition Management For Technical Personnel** ivery 4. Develo Level 1 Required Course 16 CLPs Every year the Department of Energy spends over 90 percent of its budget on purchases from the private sector. Because of the Federal Government's special fiduciary relationship, the acquisition system established to manage these expenditures of taxpayer monies is very different in some respects from commercial transactions between private parties. Level Negotiation The principal purpose of the DOE acquisition system is to deliver on a timely basis the best value product or service to the Strategies and customer while adhering to the laws, regulations, policies, and directives of the United States Government and the Techniques Department. This course examines the portion of the acquisition process commonly referred to as "procurement." This 24 CLPs part of the process typically begins with the completion of the acquisition strategy and the development of the acquisition plan. The process proceeds through development of a solicitation, solicitation and evaluation of proposals, and contract award. Another course (see below), Contract Administration for Technical Representatives, continues through contract administration and contract closeout (although these topics are summarized at the end of this course to provide a Γwο complete picture of the acquisition process). Intended Audience: Prospective Level 1 Federal Project Directors, DOE Program Managers, and IPT members assigned to Budgeting s in DOE projects (including matrixed personnel). This is a Level 1 core course for certification in the Project Management Career Development Program (PMCDP). Other members of the acquisition workforce may wish to take this course for continuing 32 CLPs Level education credit. nental Laws Course Format: Online on-demand gulations **Equivalent Courses:** CLPs **CON 100- Shaping Smart Business Arrangements** FCN 101- Contracting Basics Dne apital Planning DOE O 413.3B Capital Asset Projects 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a po and 3. Course **Managing Contract Changes** ivery 4. Develo Level 1 Required Course 4 days / 32 CLPs This customized course is designed to better prepare DOE Contracting Officers (COs) and Federal Project Directors (FPDs) to manage project changes on complex construction projects through effective management of contract modifications and change orders. DOE guidance, reference materials and actual cases from the Boards of Contract Appeals and the U.S. Level Negotiation Court of Federal Claims are discussed to improve participant understanding of principles, concepts and doctrines that Strategies and impact contract change management in DOE. The course discusses DOE's historical and current contracting environment, Techniques the doctrine of constructive change, potential differences between project management changes and contract changes, 24 CLPs and the things DOE senior level contracting and program officials can do to improve the effectiveness of the change management process. Intended Audience: Prospective Level 1 Federal Project Directors, certified FAC-Cs and FAC-CORs, DOE Program Managers, and IPT members assigned to projects (including matrixed personnel). Other members of the acquisition workforce may Γwο wish to take this course for continuing education credit. Budgeting Course Format: 4 day Instructor-led classroom delivery s in DOE **Equivalent Courses:** Level / 32 CLPs None iental Laws **CHRIS Code: 002102** gulations **CLPs** Dne apital Planning **DOE O 413.3B** Capital Asset Projects 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a p 3. Course **Earned Value Management Systems** ivery 4. Develo Level 1 Required Course 21 CLPs This course is designed to address EVMS and project reporting requirements in order to effectively apply EVMS approaches in project management. Participants learn about Earned Value Management (EVM) processes, how they are interrelated, and how they must be integrated to produce an effective EVM System. The course is designed to give Level Negotiation participants a framework for applying EVMS approaches to project management and knowledge of the process sufficient Strategies and to oversee contractor EVMS processes. Techniques Some of the topics covered include strategies to: 24 CLPs Plan project work; Monitor performance; Utilize work breakdown structures (WBS); and Γwο Collect and interpret earned value data. Budgeting s in DOE Intended Audience: Prospective Level 1 Federal Project Directors, certified FAC-CORs, DOE Program Managers, and IPT members assigned to projects (including matrixed personnel). Other members of the acquisition workforce may wish to / 32 CLPs Level take this course for continuing education credit. nental Laws Course Format: Online on-demand gulations **Equivalent Courses:** CLPs EVMS 24/7 on DOE's Online Learning Center **FPM 103** Dne apital Planning DOE O 413.3B Capital Asset Projects 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a p 3. Course **Contracting Officer Representative** ivery 4. Develo Level 1 Required Course 32 CLPs This course is specifically designed for Contracting Officer's Representatives (CORs) who are responsible for assuring that contractors are performing the technical portion of their job. This course will provide CORs the breadth of knowledge required to perform their role, including knowledge related to COR roles and responsibilities, as well as fundamentals of Level Negotiation contracting regulations, types, phases, and other elements; awareness of ethical, legal, and cultural factors that impact Strategies and COR responsibilities; and information necessary to effectively evaluate situations, apply knowledge gained, and make Techniques correct decisions to carry out COR responsibilities. 24 CLPs Course objectives include: Understanding the role of the COR Understanding what constitutes an effective COR Γwο Learning to read and understand contract Budgeting Intended Audience: Anyone currently serving as or training to become a Contracting Officer's Representative s in DOE Level Course Format: DAU online on-demand / 32 CLPs **Equivalent Courses:** nental Laws gulations • CLC 222- Contracting Officers Representative (COR) Online Training CLPs Dne pital Planning DOE O 413.3B Capital Asset Projects 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a po 3. Course **Performance-Based Management Contracting** ivery 4. Develo Level 1 Flective Course 3 days / 24 CLPs This course is designed so that Program and Project Managers, as well as contracting personnel, better understand how to manage performance-based contracts at DOE facilities. The course addresses the processes by which these performance-based site and facility management contracts are planned, awarded, and managed after award. The overall Level Negotiation objective is to focus on major site and facility contracts and to present the performance-based concepts and tools required Strategies and in each aspect of the planning, award, and post award processes for these contracts. This course focuses exclusively on Techniques major site and facility contracts and the unique challenges involved in making them performance-based. 24 CLPs Intended Audience: Prospective Level 1 Federal Project Directors, certified FAC-CORs, DOE Program Managers, and IPT members assigned to projects (including matrixed personnel). This is a Level 1 core course for certification in the Project Management Career Development Program (PMCDP). It is also a Level 2/3 required course for FAC-COR certification. Other members of the acquisition workforce may wish to take this course for continuing education credit. Γwο Course Format: 3 day Instructor-led classroom delivery Budgeting **Equivalent Courses:** s in DOE Level / 32 CLPs None **CHRIS Code:** 001951 iental Laws gulations **CLPs** Dne apital Planning **DOE O 413.3B** Capital Asset **Projects** 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a po and 3. Course **LEED for New Construction and Existing Buildings** ivery 4. Develo Level 1 Elective Course 2.5 days / 20 CLPs Leadership in Energy and Environmental Design (LEED®) for New Construction and Existing Buildings is designed to provide participants with the knowledge of the LEED® rating system and five LEED® categories and to make existing buildings and new construction environmentally sound. This course supports the Federal mandates for agencies to improve their Level Negotiation buildings' efficiency and environmental performance including green building certification. Strategies and Techniques Intended Audience: Prospective Level 1 Federal Project Directors, DOE Program Managers, IPT members assigned to projects (including matrixed personnel). This is a Level 1 elective course for certification in the Project Management Career 24 CLPs Development Program (PMCDP). Course Length: 2.5 days **Equivalent Courses:** Γwο None Budgeting **CHRIS Code:** 001936 s in DOE Level / 32 CLPs iental Laws gulations **CLPs** Dne apital Planning **DOE O 413.3B** Capital Asset Projects 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a pr and 3. Course **Capital Planning for DOE O 413.3B Capital Asset Projects** ivery 4. Develo Level 1 Elective Course 2 days / 16 CLPs In this course, participants review capital planning questions they should ask when a non-information technology capital asset project under the DOE O 413.3B is in each phase of the project's acquisition. The course reviews the documents and reports from the budget formulation and acquisition planning processes that can be used to support the DOE's budget Level Negotiation submissions to the Office of Management and Budget (OMB). This course tracks the critical decision deliverables, reports, Strategies and cyclical budget data, and narratives in the context of a structured capital planning process and the critical decision model Techniques for capital asset projects. 24 CLPs Intended Audience: Prospective Level 1 Federal Project Directors, DOE Program Managers, and IPT members assigned to projects (including matrixed personnel). This is a Level 1 core course for certification in the Project Management Career Development Program (PMCDP). Other members of the acquisition workforce may wish to take this course for continuing education credit. Γwο Course Format: 2 day Instructor-led classroom delivery Budgeting **Equivalent Courses:** s in DOE Level / 32 CLPs None **CHRIS Code:** 002152 iental Laws gulations **CLPs** Dne apital Planning **DOE O 413.3B** Capital Asset **Projects** 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a p 3. Course **Advanced Concepts in Project Management** ivery 4. Develo Level 2 Required Course 50 CLPs This course covers the concepts of project management at an advanced level of expertise, and expands upon best practices in project management from Federal agencies and the private sector. The course introduces a variety of advanced topics and includes a research project for participants to practice applying these concepts to DOE-specific Level projects. In addition, participants will make formal presentations as part of the course to practice communications skills Negotiation Strategies and that are needed to make persuasive well-founded arguments to multiple stakeholders on projects. Stakeholders may Techniques include senior management, Congress and the public. 24 CLPs The course focuses on the following topics: **Project Management Competencies;** Quality Management; Technology Readiness Assessment; Two **Project Definition Rating;** Project Execution; Budgeting s in DOE Financial Management; and Lessons Learned. Level / 32 CLPs Target Audience: Prospective Level 2 Federal Project Directors, DOE Program Managers, and IPT members assigned to nental Laws projects (including matrixed personnel). This is a Level 2 core course for certification in the Project Management Career gulations Development Program (PMCDP). Other members of the acquisition workforce may wish to take this course for continuing CLPs education credit. Course Format: This course is delivered via Adobe Connect in a series of 11 webinars over a period of 10 weeks. Webinars are held twice weekly for 2 hours each. The live sessions are complemented by outside of class activities that include Dne collaborative group work to build a presentation on one of the topics above. **Equivalent Courses:**  None apital Planning DOE O 413.3B **CHRIS Code: 001023** Capital Asset **Projects** 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a po 3. Course **Scope Management Baseline Development** ivery 4. Develo Level 2 Required Course 3 days / 24 CLPs This course is designed to enhance a Program or Project Manager's ability to clearly define requirements and scope, develop a defensible baseline, and manage conformance to the baseline throughout the project life-cycle. The course emphasizes the development of the Work Breakdown Structure (WBS). Level Negotiation Topic areas include: Strategies and Techniques Baseline development techniques; 24 CLPs Identifying risk and constraints for requirements; Prioritizing requirements; Trade-off analysis; Γwο Iterative requirements management; and Budgeting Scope change/configuration management. s in DOE Intended Audience: Prospective Level 2 Federal Project Directors, DOE Program Managers, and IPT members assigned to Level / 32 CLPs projects (including matrixed personnel). This is a Level 2 core course for certification in the Project Management Career Development Program (PMCDP). Other members of the acquisition workforce may wish to take this course for continuing ental Laws gulations education credit. **CLPs** Course Format: 3 day Instructor-led classroom delivery **Equivalent Courses:** Dne None **CHRIS Code:** 001036 apital Planning **DOE O 413.3B** Capital Asset **Projects** 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a pr 3. Course **Cost and Schedule Estimation and Analysis** ivery 4. Develo Level 2 Required Course 5 days / 40 CLPs This course provides participants with a high-level overview of cost and schedule estimation techniques necessary for successful project management. Participants receive practical skills training on how to develop independent cost and schedule estimates and how such estimates factor into a project's baseline. The course teaches skills used across the Level project life cycle, but focuses on estimates developed in project planning and the early stages of project execution Negotiation Strategies and (preliminary design). Techniques Course topics include: 24 CLPs identifying cost and schedule estimates; Basic estimating methods: Group analysis techniques; Γwο Applying life-cycle costing technique; Budgeting s in DOE Validating estimates; / 32 CLPs Level Determining critical path schedule for a project; ental Laws Crashing and fast-tracking methods; and gulations Relationship between budget authorization (BA) and budget outlay (BO) schedules, project estimates, and the **CLPs** project funding profile. Intended Audience: Prospective Level 2 Federal Project Directors, DOE Program Managers, IPT members assigned to projects (including matrixed personnel). This is a Level 2 core course for certification in the Project Management Career Dne Development Program (PMCDP). **Course Format:** 5 day Instructor-led classroom delivery apital Planning **Equivalent Courses:** Level **DOE O 413.3B** Capital Asset None **Projects CHRIS Code:** 001044 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a po and 3. Course **Leadership through Effective Communication** ivery 4. Develo Level 2 Required Course 3 Days / 24 CLPs This course is a highly interactive session focused on developing powerful communication skills to lead people and manage projects. The course emphasizes personal communications preferences and the impacts of these preferences on others, and provides tips and techniques for maximizing effectiveness in leading project teams. Skills-based lessons include the Level Negotiation use of different communications styles, and techniques for managing conflict, giving and receiving feedback, and decision-Strategies and making. The course provides a practical and effective toolkit for communicating in a project-focused environment, Techniques and a resource list for continuous learning. 24 CLPs Intended Audience: Prospective Level 2 Federal Project Directors, DOE Program Managers, and IPT members assigned to projects (including matrixed personnel). This is a Level 2 core course for certification in the Project Management Career Development Program (PMCDP). Other members of the acquisition workforce, as well as other DOE managers and team members, may wish to take this course for continuing education credit. Γwο Course Format: 3 day Instructor-led classroom delivery Budgeting **Equivalent Courses:** s in DOE Level / 32 CLPs None **CHRIS Code:** 002366 iental Laws gulations **CLPs** Dne apital Planning **DOE O 413.3B** Capital Asset **Projects** 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a po and 3. Course **Project Management Simulation** ivery 4. Develo Level 2 Required Course 5 days / 40 CLPs This computer-based project management simulation enables participants to exercise and integrate a wide variety of project management skills, including developing defensible project plans; applying PM tools and techniques to plan, track, and control projects; improving project team performance; analyzing project information; identifying complex Level Negotiation project tradeoff decisions; and recognizing when to focus on task and when to focus on process. Strategies and Techniques Intended Audience: Level 2 Federal Project Directors, DOE Program Managers, IPT members assigned to projects (including matrixed personnel). This is a Level 2 core course for certification in the Project Management Career 24 CLPs Development Program (PMCDP). **Course Format:** 5 day Instructor-led classroom delivery **Equivalent Courses:** Γwο FPM 201- Project Management Applications Budgeting **CHRIS Code:** 001029 s in DOE Level / 32 CLPs iental Laws gulations **CLPs** Dne apital Planning **DOE O 413.3B** Capital Asset Projects 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a po and 3. Course **Real Property Asset Management** ivery 4. Develo Level 2 Elective Course 3 days / 24 CLPs During this course, participants focus on the requirements of DOE Order 430.1B, Real Property Asset Management (RPAM). Participants acquire a systematic, integrated approach to the management of federal real property, order requirements, reporting mechanisms, and roles and responsibilities for RPAM. The course addresses real property Level planning and management, Ten Year Site Plans, real property status reporting requirements and mechanisms, value Negotiation Strategies and management, performance management and DOE and contractor role and responsibilities for real property asset Techniques management. Also included in the course are the requirements contained in the February 2004 Executive Order 13327, 24 CLPs Federal Real Property Asset Management and the January 2007 Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management. Intended Audience: Prospective Level 2 Federal Project Directors, DOE Program Managers, IPT members assigned to projects (including matrixed personnel). This is a Level 2 elective course for certification in the Project Management Career Γwο Development Program (PMCDP). Budgeting Course Format: 3 day Instructor-led classroom delivery s in DOE **Equivalent Courses:** Level / 32 CLPs None iental Laws **CHRIS Code: 001183** gulations **CLPs** Dne apital Planning **DOE O 413.3B** Capital Asset **Projects** 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a po 3. Course **Federal Budgeting Process in DOE** ivery 4. Develo Level 2 Flective Course 4 days / 32 CLPs This course is designed to provide DOE and NNSA program and project managers a working knowledge of Federal financial and managerial systems to accomplish their Department's budgeting and accounting processes, including budget submissions, managing authorized funding and establishing success criteria. Participants apply the foundational skills Level Negotiation required to successfully manage a project through its financial life cycle. These skills include: integrating projects, Strategies and programs, and missions; resourcing and funding programs; validating and funding projects; effectively participating in the Techniques budget process; managing the flow of funds to your programs and projects and; effectively using financial accounting and 24 CLPs reporting systems to attain program and project success. Intended Audience: Prospective Level 2 Federal Project Directors, DOE Program Managers, IPT members assigned to projects (including matrixed personnel). This is a Level 2 elective course for certification in the Project Management Career Development Program (PMCDP). Other DOE personnel may wish to take this course for continuing education credit. Γwο Course Format: 4-day instructor-led course Budgeting 4-day instructor led classroom delivery for those wishing to take the course to meet Level II PMCDP certification s in DOE requirements. This version of the course MUST be taken to receive PMCDP credit. Level / 32 CLPs **Equivalent Courses:** ental Laws None gulations **CLPs CHRIS Code:** 001034 Dne apital Planning **DOE O 413.3B** Capital Asset **Projects** 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a po 3. Course **Value Management** ivery 4. Develo Level 2 Elective Course 3 days / 24 CLPs Value Management (VM) provides participants with techniques for re-examining projects with a view to reducing total project costs. Designed for Federal and contractor personnel from Senior Managers to Project Directors and their extended teams, the course includes an overview of VE/VM concepts, principles, and definitions, and the various legal and Level Negotiation regulatory drivers that now mandate its application. It also focuses on building skills and understanding for applying Strategies and VE/VM practices, tools and techniques to improve project and program cost and schedule results, especially Return on Techniques Investment (ROI). 24 CLPs This course also teaches skills for organizing a VM effort, structuring a job plan, and analyzing the functions of systems, equipment, facilities and supplies to achieve the lowest life-cycle costs while maintaining the essential values of safety, performance, reliability, and quality. The course applies modern practices in the field of Value Engineering and Value Management (VE/VM) that emphasize good communications and effective leadership of the people involved. Γwο Intended Audience: Prospective Level 2 Federal Project Directors, DOE Program Managers, and IPT members assigned to Budgeting projects (including matrixed personnel). This is a Level 2 elective course for certification in the Project Management Career s in DOE Development Program (PMCDP). Level / 32 CLPs Course Format: 3 day Instructor-led classroom delivery iental Laws **Equivalent Courses:** gulations None **CLPs CHRIS Code: 001037** Dne apital Planning **DOE O 413.3B** Capital Asset **Projects** 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a p and 3. Course **Environmental Laws and Regulations** ivery 4. Develo Level 2 Flective Course 24 CLPs This course provides participants an overview and basic knowledge of environmental laws and regulations pertinent to DOE projects. The course includes key DOE directives (especially DOE O 450.1A, DOE O 413.3B and DOE O 430.2B) and applicable Federal regulations and executive orders. Level Negotiation The course introduces participants to the wide range of environmental requirements that apply to DOE facilities and Strategies and Techniques operations and the resources available to assist DOE staff and managers if they are asked to support or manage a project with potential environmental impacts. This course also serves to inform DOE employees of their roles in helping the 24 CLPs Department to achieve its environmental sustainability goals, including reducing energy use, enhancing pollution prevention, and conserving water. This course is not meant to be an instruction manual for environmental topics at the department; rather, it aims to educate participants as to when to ask questions and to whom they should be directed. Two Intended Audience: Prospective Level 2 Federal Project Directors, DOE Program Managers, IPT members assigned to projects (including matrixed personnel). This is a Level 2 elective course for certification in the Project Management Career Budgeting Development Program (PMCDP). Other DOE personnel may wish to take this course for continuing education credit. s in DOE Course Format: Online on-demand Level / 32 CLPs **Equivalent Courses:** nental Laws None gulations CLPs Dne apital Planning DOE O 413.3B Capital Asset Projects 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a po 3. Course **Advanced Risk Management** ivery 4. Develo Level 3 Required Course 3.5 days / 28 CLPs The purpose of this course is to provide the Federal Project Director with an advanced understanding of the concepts and applications of risk and opportunity management, within the context of federally managed Department of Energy acquisition projects. This course improves Federal Project Directors' ability to develop and execute project risk Level management plans and to oversee the risk management activities of their contractors. Negotiation Strategies and Techniques The course provides participants with more advanced treatment of risk management principles and concepts. It builds upon the concepts included in the basic Risk Analysis and Management course and reviews topics that are appropriate for 24 CLPs Level 3 and 4 Federal Project Directors. It also introduces the notion of opportunity with respect to DOE acquisition project management. In addition to a review of topics covered in the basic course, participants discuss the impact of technology development and how new technology risk affects the typical project. The course also addresses representative project Γwο risk management software risk analysis tools, and uses two large capital and operating dollar projects to enhance the Budgeting learning through case study work. s in DOE Intended Audience: Prospective Level 3 Federal Project Directors, DOE Program Managers, and IPT members assigned to Level / 32 CLPs projects (including matrixed personnel). This is a Level 3 core course for certification in the Project Management Career Development Program (PMCDP). Other members of the acquisition workforce may wish to take this course for continuing ental Laws gulations education credit. **CLPs** Course Format: 3.5 days Instructor-led classroom delivery **Equivalent Courses:** Dne None **CHRIS Code:** 001042 apital Planning **DOE O 413.3B** Capital Asset **Projects** 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a po 3. Course **Program Management and Portfolio Analysis** ivery 4. Develo Level 3 Required Course 5 days / 40 CLPs Focusing on collaboration, defending resources, and creative compromise, this automated simulation and case study addresses developing a strategic view of projects. Participants learn about: Managing priorities among projects, Level Negotiation Strategies and Coordinating the information needs of multiple projects, Techniques Allocating and managing resources, 24 CLPs Preparing project staff to meet future needs, Balancing responsibilities for project and functional management, and Applying project management methods in a complex project setting. Γwο The objective of this computer-based program management simulation is to enable participants to gain hands-on Budgeting experience planning, implementing, and coordinating multiple, complex projects across an organization. s in DOE Intended Audience: Prospective Level 3 Federal Project Directors, DOE Program Managers, and IPT members assigned to Level / 32 CLPs projects (including matrixed personnel). This is a Level 3 core course for certification in the Project Management Career Development Program (PMCDP). ental Laws gulations Course Format: 5 day Instructor-led classroom delivery **CLPs Equivalent Courses:** • FPM 301- Program Management Dne **CHRIS Code:** 001025 apital Planning **DOE O 413.3B** Capital Asset **Projects** 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a po 3. Course **Executive Communications** ivery 4. Develo Level 3 Required Course 3 days / 24 CLPs This course is designed to provide DOE participants with high-level communication skills to address issues/activities of specific importance to internal, public, media, and congressional audiences. The course addresses how to engage different audiences depending on their needs and interests, create effective messages, and improve delivery skills for a Level variety of formats including print media, TV, and panel discussions. During this training program, two Executive Negotiation Strategies and Communication Coaches offer key techniques through interactive modules and video practice to help DOE participants Techniques deliver successful presentations, media interviews, and congressional testimony or briefings. DOE participants are 24 CLPs encouraged to share their experiences as senior-level managers who have been involved in the project management process. The objective of this course is to help each DOE participant enhance their current communication knowledge to effectively communicate powerful, positive messages to target audiences. Intended Audience: Prospective Level 3 Federal Project Directors, DOE Program Managers, IPT members assigned to Γwο projects (including matrixed personnel). This is a Level 3 core course for certification in the Project Management Career Development Program (PMCDP). Other senior leaders may wish to take this course for continuing education credit. Budgeting s in DOE Course Length: 3 days Level / 32 CLPs **Equivalent Courses:** iental Laws FPM 304- Leading Federal Government Project Managers gulations **CHRIS Code:** 001031 **CLPs** Dne apital Planning **DOE O 413.3B** Capital Asset **Projects** 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a pr 3. Course **Advanced Earned Value Management Techniques** ivery 4. Develo Level 3 Required Course 3 days / 24 CLPs Advanced Earned Value for Federal Government Project Managers helps you direct and manage EVM implementation across the program life cycle and build up extensive EVM capabilities to be applied to large, complex projects/programs. This course focuses on the senior-level business, cost, and financial management competency, as defined by the latest Level Negotiation FAC-P/PM policy, and will help you harness the power of EVM to control your programs. By the end of the course, you will Strategies and Techniques be confidant indicating work progress in a more objective way within and across projects and properly relate cost, schedule, and technical accomplishments. The course also will enable you to create and utilize a realistic performance 24 CLPs measurement baseline (PMB), and provide management with information at a practical level. Finally, as part of the course activities, you will prepare an action plan to create immediate impact on your control of projects. Intended Audience: Prospective Level 3 Federal Project Directors, DOE Program Managers, IPT members assigned to projects (including matrixed personnel). This is a Level 3 core course for certification in the Project Management Career Γwο Development Program (PMCDP). Other senior leaders may wish to take this course for continuing education credit. Budgeting Course Format: 3 day Instructor-led classroom delivery s in DOE Level **Equivalent Courses:** / 32 CLPs FPM 303- Senior FAC-P/PM Business, Cost Estimating, and EVM iental Laws gulations **CHRIS Code: 002689 CLPs** Dne apital Planning **DOE O 413.3B** Capital Asset **Projects** 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a po and 3. Course **Project Execution and Readiness Reviews** ivery 4. Develo Level 3 Elective Course 3 days / 24 CLPs This course focuses on the skills necessary to successfully manage engineering and design, construction, acceptance and transition, and project closeout. Participants learn how to organize, manage, and review project designs and documentation, and to oversee contractor performance during construction. Participants also learn the skills needed to Level Negotiation identify potential problems and how to plan to avoid them. Participants are given extensive practice in cost and Strategies and schedule monitoring, including earned-value analysis, trend analysis and forecasting, managing baselines through Techniques performance monitoring and change control. 24 CLPs Intended Audience: Prospective Level 3 Federal Project Directors, DOE Program Managers, and IPT members assigned to projects (including matrixed personnel). This is a Level 3 elective course for certification in the Project Management Career Development Program (PMCDP). Course Format: 3 day Instructor-led classroom delivery Γwο **Equivalent Courses:** Budgeting s in DOE None Level / 32 CLPs **CHRIS Code:** 001039 iental Laws gulations **CLPs** Dne apital Planning **DOE O 413.3B** Capital Asset Projects 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a po 3. Course **Systems Engineering** ivery 4. Develo Level 3 Elective Course 3 days / 24 CLPs This course focuses on how implementation of the Systems Engineering (SE) process, from project initiation through the entire life-cycle, can decrease the likelihood of cost overruns, schedule delays and compromises in program and project technical performance. This course demonstrates how the SE process is an interdependent (and iterative) approach to Level Negotiation technical management, acquisition and supply, system design, product realization, and technical evaluation. The course Strategies and describes how the SE process cascades through each level of the system, beginning at the top (the system level) and Techniques propagating through a series of steps which eventually lead to a preferred system solution. This course describes in detail 24 CLPs the purpose and value of each of the specific SE process steps. Step-by-step directions, along with exercises, help course participants determine when each step is complete. Intended Audience: Prospective Level 3 Federal Project Directors, DOE Program Managers, and IPT members assigned to projects (including matrixed personnel). This is a Level 3 elective course for certification in the Project Management Career Γwο Development Program (PMCDP). Other members of the acquisition workforce may wish to take this course for continuing education credit. Budgeting s in DOE **Course Format:** 3 day Instructor-led classroom delivery Level / 32 CLPs **Equivalent Courses:** iental Laws None gulations **CHRIS Code:** 001049 **CLPs** Dne apital Planning **DOE O 413.3B** Capital Asset **Projects** 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a po and 3. Course **Strategic Planning** ivery 4. Develo Level 3 Elective Course 3 days / 24 CLPs This course provides participants with an introduction to the skills needed to develop effective strategic plans for organizations, programs and projects, and techniques they can employ to make better strategic decisions. Participants review theories and techniques for improving productivity, as well as techniques for formulating and implementing a Level Negotiation planning process. Participants are shown how to make decisions based on strategic plans that give specific direction yet Strategies and remain flexible enough to respond to changing conditions. Techniques Intended Audience: Prospective Level 3 Federal Project Directors, DOE Program Managers, and IPT members assigned to 24 CLPs projects (including matrixed personnel). This is a Level 3 elective course for certification in the Project Management Career Development Program (PMCDP). Other members of the acquisition workforce may wish to take this course for continuing education credit. Course Format: 3 day Instructor-led classroom delivery Γwο **Equivalent Courses:** Budgeting s in DOE None Level / 32 CLPs **CHRIS Code: 001043** iental Laws gulations **CLPs** Dne apital Planning **DOE O 413.3B** Capital Asset **Projects** 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a po and 3. Course **Labor Management Relations** ivery 4. Develo Level 3 Flective Course 3 days / 24 CLPs This course provides participants with a basic overview of labor management relations. Participants learn about labor laws and regulations, implementing bargaining practices, and specific methods for resolving disputes. Additionally, the course discusses techniques for working with unions and unionized employees, and presents guidance on contract interpretation. Level Negotiation Intended Audience: Prospective Level 3 Federal Project Directors, DOE Program Managers, and IPT members assigned to Strategies and Techniques projects (including matrixed personnel). This is a Level 3 elective course for certification in the Project Management Career Development Program (PMCDP). Other members of the acquisition workforce may wish to take this course for continuing 24 CLPs education credit. Course Format: 3 day Instructor-led classroom delivery **Equivalent Courses:** Γwο None Budgeting **CHRIS Code:** 001038 s in DOE Level / 32 CLPs iental Laws gulations **CLPs** Dne apital Planning **DOE O 413.3B** Capital Asset Projects 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a p 3. Course **Facilitating Conflict Resolution** ivery 4. Develo Level 3 Flective Course 24 CLPs This course covers a variety of topics specific to resolving conflicts in the workplace. Areas discussed include: recognizing potential conflict situations and neutralizing them before they escalate; using problem-solving and decision-making techniques to meet the needs of everyone affected; negotiating "win-win" solutions for all parties involved; and Level minimizing or resolving conflict in groups and between employees using appropriate interpersonal strategies. Participants Negotiation Strategies and take the Thomas-Kilmann® conflict mode assessment instrument (TKI) to reveal their preferred style of managing conflict. Techniques and learn the advantages and disadvantages of different styles. The course includes a significant emphasis on the use of 24 CLPs facilitation techniques within the conflict resolution process. Intended Audience: Prospective Level 3 Federal Project Directors, DOE Program Managers, and IPT members assigned to projects (including matrixed personnel). This is a Level 3 elective course for certification in the Project Management Career Development Program (PMCDP). Other members of the acquisition workforce and other DOE managers or team members Γwο may wish to take this course for continuing education credit. Budgeting Course Format: This course is delivered via Adobe Connect in a series of five 90-minute live webinars over a period of 6 s in DOE weeks. These webinars are complemented with self-paced learning and online collaborative group work. Level 32 CLPs **Equivalent Courses:** nental Laws None aulations **CHRIS Code: 001558** CLPs Dne apital Planning DOE O 413.3B Capital Asset **Projects** 2 days 16 CLPs

PMCDP Curriculum Learning Map – Updated May 4, 2016 Key 1. Participate in a peer review Gray outline - Instructo 2. Lead a p and 3. Course **Negotiation Strategies and Techniques** ivery 4. Develo Level 3 Elective Course 24 CLPs In this course, participants learn about collaborative and competitive negotiations, negotiation strategy and planning, negotiations within and between teams, identifying key stakeholder interests in negotiations, determining best alternatives to negotiated agreements, and effectively communicating during negotiations. Through reading assignments Level from Harvard Law School's prestigious Program on Negotiation and mini case studies customized for the Department of Negotiation Strategies and Energy, participants are introduced to methods to improve their performance in negotiating agreements. Participants then Techniques practice using learned strategies during the course. 24 CLPs Intended Audience: Prospective Level 3 Federal Project Directors, DOE Program Managers, and IPT members assigned to projects (including matrixed personnel). This is a Level 3 elective course for certification in the Project Management Career Development Program (PMCDP). Other members of the acquisition workforce and other DOE managers or team members may wish to take this course for continuing education credit. Γwo Course Format: This course is delivered via Adobe Connect in a series of six 90-minute live webinars over a period of 7 Budgeting weeks. These webinars are complemented with self-paced learning and online collaborative group work. s in DOE **Equivalent Courses:** Level / 32 CLPs None nental Laws **CHRIS Code: 001047** gulations CLPs Dne apital Planning DOE O 413.3B Capital Asset **Projects** 2 days 16 CLPs