



DEFENSE ACQUISITION UNIVERSITY

PQM 201B, Intermediate Production, Quality, and Manufacturing

100622

Course Learning/Performance Objectives followed by its enabling learning objectives on separate lines if specified.

1	<p>Develop an integrated manufacturing plan, analyze the adequacy of the details of the manufacturing and quality aspects IAW DoD 5000 series, FAR / DFARS, and commercial quality and production planning models.</p> <p>Identify the elements of good manufacturing planning.</p> <p>Select the type of information required and apply the processes involved in creating a bill-of-materials, route sheets, and manufacturing plans.</p> <p>Identify the key elements of a work breakdown structure.</p> <p>Develop a manufacturing and quality assurance plan for an assigned system.</p> <p>Identify the attributes of a producible design.</p> <p>Explain key elements of a Production Readiness Review</p>
2	<p>Given a scenario and materials, demonstrate lean enterprise practices.</p> <p>Describe the principles, concepts, benefits, and practices associated with Lean Manufacturing.</p> <p>Apply Lean manufacturing precepts to a production environment</p>
3	<p>Given examples recognize the products of analytical tools and determine whether these tools and their products have been used properly IAW courseware products provided.</p> <p>Recognize the concepts of Design of Experiments (DOE) and the Six Sigma program.</p> <p>Perform a Process Capability and Process Performance Analysis and identify actions to be taken to improve process performance and reduce the amount of non-conforming product.</p> <p>Apply seven quality tools in a manufacturing context</p>
4	<p>Recognize key quality issues and determine the adequacy of a contractor's quality system.</p> <p>Identify the basic concepts relating to designing and managing quality attributes.</p> <p>Describe the activities associated with various audit techniques.</p> <p>Recognize advanced quality system tools.</p> <p>Describe quality assurance principles.</p> <p>Recognize the concepts of quality function deployment (QFD).</p> <p>Distinguish between the definitions of product key characteristics and process key characteristics.</p> <p>Describe the goals of the ISO 9000 series standards.</p>
5	<p>Given examples assess the effectiveness of Manufacturing systems and processes IAW DoDD 5000.1, DoDI 5000.2, and DFARS MMAS requirements.</p> <p>Identify the fundamental elements of manufacturing control systems such as MRP and MRP II.</p> <p>Recognize the concepts of control systems as they relate to production and quality management.</p> <p>Explain the fundamentals of the Theory of Constraints.</p> <p>Recognize other manufacturing and business concepts and practices, such as JIT, MRP/MRPII systems.</p>
6	<p>Given a Bill-of-Materials, Manufacturing Plan, contract schedule, approved progress payment requests, and the results of a physical inventory count following the manufacturing plan; Analyze the contractor's production progress and make a recommendation regarding continuing contract financing.</p> <p>Identify the elements of technical evaluations and relate them to the contractors cost estimating and accounting systems.</p> <p>Recognize the different methods of estimating cost, such as the comparison methods, engineering method, and learning curves.</p> <p>Select and apply the appropriate method of cost estimating based on available contractor data and the acquisition environment.</p> <p>Describe the policies and procedures governing the use of progress payments as a means of contract financing.</p>
7	<p>Relate the impact of on-going acquisition initiatives to current lifecycle, production and quality management concerns.</p> <p>Become familiar with the latest issues in the manufacturing industry.</p> <p>Become familiar with the latest issues in defense acquisition.</p>