The University of Southern Queensland

Course Specification

Description: Logistics Management

<table>
<thead>
<tr>
<th>Subject</th>
<th>Cat-Nbr</th>
<th>Class</th>
<th>Term</th>
<th>Mode</th>
<th>Units</th>
<th>Campus</th>
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<td>MGT</td>
<td>8021</td>
<td>10276</td>
<td>1, 2002</td>
<td>WEB</td>
<td>1.00</td>
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Academic Group: FOBUS
Academic Org: FOB005
HECS Band: 2
ASCED Code: 080399

STAFFING
Examiner: David Cowper
Moderator: Barrie Todhunter

RATIONALE
A new system will not achieve its full operational capability unless it has efficient, effective, through-life logistics support. Logistics management is the process by which a system to provide this logistics support is designed, implemented and operated. Because decisions made during the design, development, evaluation and acceptance of a new system can have considerable impact on logistic support requirements, it is important that operational and logistics aspects are integrated into project planning from an early stage. To ensure this happens large organizations like Defence are using the concept of Integrated Logistics Support (ILS) in the capital system acquisition process. This concept is based on a single authority being responsible for coordinating and integrating the complete logistics support arrangements.

SYNOPSIS
This course focuses on the management aspects of the design of logistics support systems for new products and capital equipment. It includes both the "military" approach to logistics through the Integrated Logistics Support (ILS) methodologies and the traditional "business" logistics areas of inventories, warehousing and transportation. The course emphasises the life-cycle approach to logistics support. It considers how reliability, availability and maintainability factors influence design and life cycle costs, the concept of ILS, the elements of ILS (maintenance planning, supply support, manpower and personnel, training and training devices, technical data, facilities, packaging, handling, storage and transport, support and test equipment, and computing support), and logistics operations and coordination. It includes related topics on logistic support analysis (LSA), modelling and simulation and the practice of logistics in both private and public enterprises.
OBJECTIVES
The main objective of the course is to enable the student to manage, or interact with the person who is managing, the logistics aspects of the introduction of a complex system into operational service. On successful completion of the course the student will be able to:

- understand the logistic support implications of a major project and thus ensure that all logistic activities are formally integrated into it to achieve performance and logistic objectives at the minimum whole-of-life cost;
- appreciate the importance of logistics in controlling costs, the need for an early consideration of the logistic impacts of acquisition decisions and the timely inclusion of logistic support requirements into the project plan;
- appreciate the importance of the reliability, availability and maintainability of systems and sub-systems and understand the impact of these parameters on design and cost;
- integrate the ILS elements into a formal ILS Plan for a given project, using project management techniques;
- understand the concept of logistics support solutions and the need to support requirements throughout the service life of a system, including the use of special logistics contractors;
- use life cycle cost system models as a tool for quantitative analysis and comprehensive handling of logistics management issues and solutions;
- analyse vehicles & capital equipment replacement problems using computer-based algorithms; and
- understand the requirements and management level functions of a logistics information system.

TOPICS

<table>
<thead>
<tr>
<th>Description</th>
<th>Weighting (%)</th>
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<tbody>
<tr>
<td>1. Introduction to Logistics Management. The importance of logistics management for whole-of-life costs control.</td>
<td>5.00</td>
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<td>2. Logistics management in the capital procurement process.</td>
<td>5.00</td>
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<tr>
<td>3. Integrated Logistic Support (ILS) concepts. Major elements of ILS and need for an integrated approach.</td>
<td>15.00</td>
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<td>4. Logistics Support Analysis. The purpose of LSA, its operation and limitations.</td>
<td>10.00</td>
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<td>5. Planning logistics management activities to coincide with other project management areas.</td>
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<td>6. Alternative ILS solutions and Life Cycle Costs - why alternative solutions are considered, criteria for assessment and life-cycle implications.</td>
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<td>7. Industry as a participant in the logistics effort; considering &quot;in-house&quot; and &quot;outside&quot; participants in the trial logistics management solution.</td>
<td>10.00</td>
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<td>8. Logistics Information Systems, including Computer-aided Acquisition and Life-cycle Support (CALS).</td>
<td>10.00</td>
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9. Warehousing locations and transportation in business logistics. Storage and distribution as issues for logistics managers in the logistics strategy. 10.00

10. Re-ordering and economic order quantities - standard business logistics methods. 5.00

11. Repair or replace decisions - computer based methods. 5.00

12. Conclusion - The entire process in context. 5.00

TEXT and MATERIALS required to be PURCHASED or ACCESSED:

Books can be ordered by fax or telephone. For costs and further details use the 'Book Search' facility at http://bookshop.usq.edu.au by entering the author or title of the text.


REFERENCE MATERIALS

Reference materials are materials that, if accessed by students, may improve their knowledge and understanding of the material in the course and enrich their learning experience.


STUDENT WORKLOAD REQUIREMENTS

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<tr>
<th>ACTIVITY</th>
<th>HOURS</th>
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<tbody>
<tr>
<td>Private Study</td>
<td>108</td>
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ASSESSMENT DETAILS

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<tr>
<th>Description</th>
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<th>Wtg(%)</th>
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<tr>
<td>LIFE CYCLE COSTING ASSIGNMENT</td>
<td>35.00</td>
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<td>ASSIGNMENT 2A</td>
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<td>ASSIGNMENT 2B</td>
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<td>3 HOURS EXAMINATION</td>
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<td>40.00</td>
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NOTES:
1. Further details about the due dates are detailed in the assessment section of the Course Specifications.
2. Further details about the due dates are detailed in the assessment section of the Course Specifications.
3. Further details about the due dates are detailed in the assessment section of the Course Specifications.
4. Further details about the due dates are detailed in the assessment section of the Course Specifications.

OTHER REQUIREMENTS
1. To be assured of a passing grade in this unit students will be required to obtain at least 50% for the assignments in aggregate; at least 50% in the final examination; and an overall mark of at least 50%. Final grades for the unit will be determined by the addition of the marks obtained in each assessment item, weighted as in the Assessment Details and by considering the students' level of achievement of the objectives of the course.
2. The due date of an assignment is the date by which a student must despatch the assignment to the University, and is normally that defined in the relevant course specification. The onus is on the student to provide, if requested, proof of date of despatch.
3. Students should organise their affairs to ensure that they meet due dates for all assignments. Extensions will be granted only under exceptional extenuating circumstances, normally involving a significant medical condition.
4. Students may apply for an assignment extension either by application through DEC before the due date or by including an application with the submitted assignment after the due date. Such applications should be in writing and include supporting documentary evidence. The authority for granting extensions rests with the relevant Course Leader.
5. All assignments despatched after due dates without appropriate extension approvals or after approved extension dates will be penalised up to a maximum of 20% of the assigned mark per work day.
6. Students must retain a copy of all assignments which must be provided if/when required by the Course Leader.
Course weightings of topics should not be interpreted as applying to the number of marks allocated to questions testing those topics in an examination paper.

Students must perform at a commensurate grade level in all pieces of assessment to achieve a particular grade.