



The University of Southern Queensland

## Course specification

The current and official versions of the course specifications are available on the web at <http://www.usq.edu.au/coursespecification/current>. Please consult the web for updates that may occur during the year.

### Description: Integrated Logistics Management

Subject	Cat-nbr	Class	Term	Mode	Units	Campus
MGT	8021	74167	1, 2008	EXT	1.00	Toowoomba

<b>Academic group:</b>	FOBUS
<b>Academic org:</b>	FOB004
<b>Student contribution band:</b>	3A
<b>ASCED code:</b>	080399

### STAFFING

Examiner: Mehryar Nooriafshar  
Moderator: Greg Gunter

### OTHER REQUISITES

Students are required to have access to a personal computer, e-mail capabilities and Internet access to USQConnect. Current details of computer requirements can be found at <http://www.usq.edu.au/business/aboutfob.htm>

### 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. The course objectives define the student learning outcomes for a course. The assessment item/s that may be used to assess student achievement of an objective is/are shown in parentheses after each objective. On successful completion of this course, students should be able to:

1. 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 (Assignment 1, Assignment 2)
2. 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 (Assignment 1, Assignment 2)
3. 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 (Assignment 1, Assignment 2)
4. integrate the ILS elements into a formal ILS Plan for a given project, using project management techniques (Assignment 1, Assignment 2)
5. 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 (Assignment 1, Assignment 2)
6. use life cycle cost system models as a tool for quantitative analysis and comprehensive handling of logistics management issues and solutions (Assignment 1, Assignment 2)
7. analyse vehicles and capital equipment replacement problems using computer-based algorithms (Assignment 1, Assignment 2)
8. understand the requirements and management level functions of a logistics information system (Assignment 1, Assignment 2).

## TOPICS

	Description	Weighting (%)
1.	Introduction to integrated logistics support (ILS). The importance of logistics management for whole-of-life costs control.	5.00
2.	ILS in the capital procurement process.	5.00
3.	ILS concepts. Major elements of ILS and need for an integrated approach.	15.00
4.	Logistics support analysis (LSA). The purpose of LSA, its operation and limitations.	10.00
5.	Planning ILS activities to coincide with other project management areas.	10.00
6.	Alternative ILS solutions and life cycle costs - why alternative solutions are considered, criteria for assessment and life-cycle implications.	10.00
7.	Industry as a participant in the logistics effort; considering 'in-house' and 'outside' participants in the trial logistics support strategy solution.	10.00

8.	Logistics information systems, including computer-aided acquisition and life-cycle support (CALs).	10.00
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**

ALL textbooks and materials are available for purchase from USQ BOOKSHOP (unless otherwise stated). Orders may be placed via secure internet, free fax 1800642453, phone 07 46312742 (within Australia), or mail. Overseas students should fax +61 7 46311743, or phone +61 7 46312742. For costs, further details, and internet ordering, use the 'Textbook Search' facility at <http://bookshop.usq.edu.au> click 'Semester', then enter your 'Course Code' (no spaces).

Blanchard, BS 2004, *Logistics engineering and management*, 6th edn, Pearson Prentice-Hall, Upper Saddle River, New Jersey.

Summers, J & Smith, B 2006, *Communication skills handbook: how to succeed in written and oral communication*, 2nd edn, John Wiley & Sons, Milton, Queensland.

### **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.

Ballou, RH 1999, *Business logistics management: planning, organizing, and controlling the supply chain*, 4th edn, Prentice Hall, Upper Saddle River, New Jersey.

Finkelstein, W & Guertin, JAR 1988, *Integrated logistic support: the design engineering link*, IFS Publications, Kempston, Bedford.

Hutchinson, NE 1987, *An integrated approach to logistics management*, Prentice Hall, Englewood Cliffs, New Jersey.

Jones, JV 1995, *Integrated logistics support handbook*, 2nd edn, McGraw-Hill, New York.

### **STUDENT WORKLOAD REQUIREMENTS**

ACTIVITY	HOURS
Directed Study	54.00
Private Study	108.00

## ASSESSMENT DETAILS

Description	Marks out of	Wtg (%)	Due date
ASSIGNMENT 1	100.00	30.00	23 Apr 2008
ASSIGNMENT 2	100.00	70.00	18 Jun 2008

## IMPORTANT ASSESSMENT INFORMATION

- 1 Attendance requirements:**  
If you are an international student in Australia, you are advised to attend all classes at your campus. For all other students, there are no attendance requirements for this course. However, it is the students' responsibility to study all material provided to them or required to be accessed by them to maximise their chance of meeting the objectives of the course and to be informed of course-related activities and administration.
- 2 Requirements for students to complete each assessment item satisfactorily:**  
To satisfactorily complete an individual assessment item a student must achieve at least 50% of the marks. (Depending upon the requirements in Statement 4 below, students may not have to satisfactorily complete each assessment item to receive a passing grade in this course.)
- 3 Penalties for late submission of required work:**  
If students submit assignments after the due date without prior approval of the examiner, then a penalty of 5% of the total marks gained by the student for the assignment may apply for each working day late up to ten working days at which time a mark of zero may be recorded. See Assessment Notes item 1 below.
- 4 Requirements for student to be awarded a passing grade in the course:**  
To be assured of receiving a passing grade a student must achieve at least 50% of the total weighted marks available for the course.
- 5 Method used to combine assessment results to attain final grade:**  
The final grades for students will be assigned on the basis of the aggregate of the weighted marks obtained for each of the summative assessment items in the course.
- 6 Examination information:**  
There is no examination in this course.
- 7 Examination period when Deferred/Supplementary examinations will be held:**  
Not applicable.
- 8 University Regulations:**  
Students should read USQ Regulations 5.1 Definitions, 5.6 Assessment, and 5.10 Student Academic Misconduct for further information and to avoid actions which might contravene university regulations. These regulations can be found at <http://www.usq.edu.au/corporateservices/calendar/part5.htm>. Students should also read the Faculty of Business Policies and Procedures which can be found at <http://www.usq.edu.au/business/aboutfob.htm>.

## ASSESSMENT NOTES

- 1 Assignments:** (i) Assignments must be submitted electronically by 11.59pm (AEST) on the due date. (ii) Students must retain a copy of each assignment submitted for assessment. This must be produced within 24 hours if required by the examiner. (iii) The examiner may grant an extension of the due date of an assignment in extenuating circumstances. If

the required extension is less than seven days, there is no need to obtain prior approval. In such cases, submit your assignment as soon as possible after the due date together with any supporting documentation that might be required. The authority for granting extensions rests with the relevant examiner. (iv) The examiner will normally only accept assessments that have been prepared using electronic media. (v) The examiner will not accept submission of assignments by facsimile. (vi) Students who are disadvantaged by these regulations may be given special consideration. They should contact the examiner to negotiate such special arrangements. (vii) In the event that a due date for an assignment falls on a local public holiday in their area, such as a show holiday, the due date for the assignment will be the next day. Students are to note on the assignment cover the date of the public holiday for the examiner's convenience.

- 2 Make-up work: Students who have undertaken all of the required assessments in a course but who have failed to meet some of the specified objectives of a course within the normally prescribed time may be awarded the temporary grade: IM (Incomplete - Make up). An IM grade will only be awarded when, in the opinion of the examiner, a student will be able to achieve the remaining objectives of the course after a period of non directed personal study.
- 3 Deferred work: Students who, for medical, family/personal, or employment-related reasons, are unable to complete an assignment at the scheduled time may apply to defer an assessment in a course. Such a request must be accompanied by appropriate supporting documentation. The temporary grade IDM (Incomplete Deferred Make-up) may be awarded.