

**Course Syllabus**  
**EGLS 503 Inventory and Warehouse Management**  
**Semester 1 Academic Year 2018**

**Course ID and name:** EGLS 503 Inventory and Warehouse Management

**Course coordinator:** Asst.Prof. Dr. Assadej Vanichchinchai

**Instructors:** Academic Staffs

**Credits:** 3(3-0-6)

**Curriculum:** Master of Engineering Program in Logistics and Supply Chain (Special Program)

**Semester offering:** First semester

**Prerequisite:** None

**Course Description:**

Inventory policy; Inventory control techniques; Inventory cost analysis and control; Economic order quantity and safety stock; Warehouse location selection, space calculation and layout design; Core and supporting activities in warehouse; Cold chain; Material handling equipment; Ethics in inventory and warehouse management; Performance measurement, information and technology; Interesting topics and case study in inventory and warehouse management

**Course Learning Outcomes (CLOs)**

At the end of the course, the students will be able to

1. create academic work with integrity in Inventory and Warehouse Management.
2. efficiently apply Inventory and Warehouse Management principles of inventory, warehouse, and transportation and distribution management
3. apply knowledge of Inventory and Warehouse Management in industry and service improvement
4. systemically analyze problems and propose solutions in Inventory and Warehouse Management via research methodology.
5. work as a team with other disciplines related to Inventory and Warehouse Management.
6. communicate and select suitable method for presentation in Inventory and Warehouse Management.

**Constructive Alignment of CLO s and Program s ELO s**

| CLOs | ELO1 | ELO2 | ELO3 | ELO4 | ELO5 | ELO6 |
|------|------|------|------|------|------|------|
| 1    | I, R |      |      |      |      |      |
| 2    |      | I, R |      |      |      |      |
| 3    |      |      | I, R |      |      |      |
| 4    |      |      |      | I, R |      |      |
| 5    |      |      |      |      | I, M |      |
| 6    |      |      |      |      |      | I, P |

I = ELO is introduced & assessed

P = ELO is practiced & assessed

R = ELO is reinforced & assessed

M = Level of Mastery is assessed

**Course Schedule:**

| No. | Topic  | Teaching & Learning Strategy    | Assessment    | Instructor                            |
|-----|--|---------------------------------|---------------|---------------------------------------|
| 1   | Introduction to inventory management, advantage and disadvantage | Lecture, Case Study, Discussion | Q&A, feedback | Asst.Prof. Dr. Assadej Vanichchinchai |
| 2   | Replenishment strategy / Reorder point                           | Lecture, Case Study, Discussion | Q&A, feedback | Asst.Prof. Dr. Assadej Vanichchinchai |
| 3   | Economic order quantity / Economic production quantity           | Lecture, Case Study, Discussion | Q&A, feedback | Asst.Prof. Dr. Assadej Vanichchinchai |

|    |  |                                 |               |                                       |
|----|--|---------------------------------|---------------|---------------------------------------|
| 4  | Single period inventory / Safety stock                                     | Lecture, Case Study, Discussion | Q&A, feedback | Asst.Prof. Dr. Assadej Vanichchinchai |
| 5  | Inventory management performance measurement / Kanban                      | Lecture, Case Study, Discussion | Q&A, feedback | Asst.Prof. Dr. Assadej Vanichchinchai |
| 6  | ABC classification / Material requirement planning                         | Lecture, Case Study, Discussion | Q&A, feedback | Asst.Prof. Dr. Assadej Vanichchinchai |
| 7  | Case study / Research / Group work presentation                            | Lecture, Case Study, Discussion | Q&A, feedback | Asst.Prof. Dr. Assadej Vanichchinchai |
| 8  | Type of warehouse / Advantage  | Lecture, Case Study, Discussion | Q&A, feedback | Asst.Prof. Dr. Assadej Vanichchinchai |
| 9  | Warehouse ownership / Warehouse location                                   | Lecture, Case Study, Discussion | Q&A, feedback | Asst.Prof. Dr. Assadej Vanichchinchai |
| 10 | Storage system / Warehouse space   | Lecture, Case Study, Discussion | Q&A, feedback | Asst.Prof. Dr. Assadej Vanichchinchai |
| 11 | Warehouse layout / Inventory record system                                 | Lecture, Case Study, Discussion | Q&A, feedback | Asst.Prof. Dr. Assadej Vanichchinchai |
| 12 | Activity in warehouse / Safety, security, hygiene in warehouse             | Lecture, Case Study, Discussion | Q&A, feedback | Asst.Prof. Dr. Assadej Vanichchinchai |
| 13 | Material handling equipment / Warehouse management performance measurement | Lecture, Case Study, Discussion | Q&A, feedback | Asst.Prof. Dr. Assadej Vanichchinchai |
| 14 | Case study / Research  | Lecture, Case Study, Discussion | Q&A, feedback | Asst.Prof. Dr. Assadej Vanichchinchai |
| 15 | Group work presentation  | Lecture, Case Study, Discussion | Q&A, feedback | Asst.Prof. Dr. Assadej Vanichchinchai |

#### Assessment Criteria

|                     |     |
|---------------------|-----|
| Class participation | 10% |
| Individual work     | 20% |
| Group work          | 20% |
| Final examination   | 50% |

#### Appeal Procedure

Should the students have any appeal regarding the assessments or grade, inquiry can be made to the instructors and/or the course coordinator immediately either by direct contact, telephone or email.

#### Study Material

- Vanichchinchai, A. and Apirakkhit, S. (2018) "An Identification of Warehouse Location in Thailand", *Asia Pacific Journal of Marketing and Logistics*, 30(3), 749 – 758
- Vanichchinchai A. (2011). "Warehousing and Inventory Cost Reduction: A Case Study of an Exported Frozen Food Company". *Sripatum Review: Humanities and Social Sciences*, 11(1), 26 – 34.
- Walters, D. "Inventory Control and Management". 2nd ed. John Wiley & Sons Ltd.
- Mulcahy, D.E. "Warehouse Distribution & Operations Handbook. McGraw-Hill.