南方科技大学
SOUTHERN UNIVERSITY OF SCIENCE AND TECHNOLOGY

课程详述

COURSE SPECIFICATION

以下课程信息可能根据实际授课需要或在课程检讨之后产生变动。如对课程有任何疑问，请联系授课教师。

The course information as follows may be subject to change, either during the session because of unforeseen circumstances, or following review of the course at the end of the session. Queries about the course should be directed to the course instructor.

1.	**课程名称 Course Title**	供应链管理 Supply Chain Management
2.	**授课院系 Originating Department**	信息系统与管理工程系 Division of Information Systems & Management Engineering
3.	**课程编号 Course Code**	MIS 335
4.	**课程学分 Credit Value**	3
5.	**课程类别 Course Type**	专业选修课 Major Elective Courses
6.	**授课学期 Semester**	春季 Spring
7.	**授课语言 Teaching Language**	中英双语 English & Chinese
8.	**授课教师、所属学系、联系方式（如属团队授课，请列明其他授课教师） Instructor(s), Affiliation& Contact （For team teaching, please list all instructors）**	樊潇帅 商学院营销与运营管理析 Xiaoshuai Fan College of Business fanxs@sustech.edu.cn
9.	**实验员/助教、所属学系、联系方式 Tutor/TA(s), Contact**	待公布 To be announced
10.	**选课人数限额(可不填) Maximum Enrolment （Optional）**	

11. 授课方式 Delivery Method	讲授 Lectures	习题/辅导/讨论 Tutorials	实验/实习 Lab/Practical	其它(请具体注明) Other（Please specify）	总学时 Total
学时数 Credit Hours	48	0	0	0	48

12. 先修课程、其它学习要求 Pre-requisites or Other Academic Requirements	概率论与数理统计
13. 后续课程、其它学习规划 Courses for which this course is a pre-requisite	无 None
14. 其它要求修读本课程的学系 Cross-listing Dept.	无 None

教学大纲及教学日历 SYLLABUS

15. 教学目标 Course Objectives

This course covers issues related to operations management and supply chain management, which involves the efficient creation and delivery of goods and services. The course covers a wide range of topics, including supply chain planning, supply chain contract, information value of supply chain, VMI, lean and JIT systems. This course will emphasize on quantitative approaches and tools, though the analysis relies mainly on logical thinking, basic mathematics and algebra. We will use Excel to facilitate analysis and solutions for some problems. We will also use case studies and projects to help students connect practice with theory.

There are three primary objectives for the course:

(1) To provide an introduction to operations management, and supply chain management.

(2) To help develop and refine a quantitative approach to decision making

(3) To make you think and pay attention to the practical business!

本课程涵盖运营管理和供应链管理相关的问题，涉及货物和服务的有效生产和交付。该课程涵盖广泛的主题，包括全供应链生产、库存及物流的规划、供应链合同设计、供应链信息价值、VMI、精益生产和 JIT 系统。本课程将会介绍基本的定量方法和工具，分析主要依赖于逻辑思维、基础数学和代数，不要求学生先修进阶的优化理论和算法。课程中也将会使用 Excel 来进行一些问题的分析。课程中还将使用案例研究和项目研究来帮助学生将实践与理论联系起来，提高学生分析实际案例、解决实际问题的能力。

课程有三个主要目标：

(1) 帮助学生掌握运营管理和供应链管理的基础知识。

(2) 帮助学生习得决策制定及决策优化的定量方法

(3) 培养学生现实问题的思考能力

16. 预达学习成果 Learning Outcomes

Lectures learning outcomes:

1. Understand the basic concepts and knowledge regarding supply chain management
2. Have the capability to construct efficient contracts regarding pricing, order quantity or information to improve the performance of supply chain

Case studies/Project learning outcomes:

Students should develop analytical capabilities to deeply understand the important issues facing the company and use the knowledge learnt in this course to propose feasible and efficient ways to handle these issues.

课程学习成果：

1、了解供应链管理的基本概念和知识

2. 有能力构建关于定价、订单数量或信息的有效合同，以提高供应链的绩效

案例研究/项目学习成果：

学生应培养分析能力，深入了解公司面临的重要问题，并利用本课程中学到的知识，提出可行、有效的方法来处理这些问题。

17. 课程内容及教学日历 （如授课语言以英文为主，则课程内容介绍可以用英文；如团队教学或模块教学，教学日历须注明主讲人）
Course Contents (in Parts/Chapters/Sections/Weeks. Please notify name of instructor for course section(s), if this is a team teaching or module course.)

Class 1-2: Introduction to Supply Chain Management

Using Apple Inc as a case example, we introduce what is supply chain management, the key trade-offs in supply chain management

Class 2-7: Supply Chain Planning and Analytics

Supply chain planning and analytics contains three parts: 1) Demand Forecast; 2) Sales and Operations Planning and 3) Network Planning.

Part 1: We discuss how to use moving average, exponential smoothing and simple regression to predict market demand.

Part 2: We introduce how to determine the aggregate planning strategies, and how to use material requirements plan to achieve it, how to determine a service level of a production plan.

Part 3: Decisions relating to plant and warehouse location as well as distribution and sourcing. Use a simple linear programing example to explain how to choose the cheapest warehouse to source demand. Use Elec Com Case to describe the pull and push system in supply chain. Also, pull, push systems will be introduced here.

2 Case study: Sport Obermeyer Ltd and Barilla SpA

(Backup topics here: project schedule process)

Class 7-15: Supply Chain Contract

Supply Chain Contract contains: 1) Introduction to game model 2) Buy back 3) Revenue Sharing 4) Quantity flexible contracts 5) Channel Selection 6) Smart pricing

Based one the game-theoretical framework, different supply contracts will be introduced to enhance the supply chain

performance.

3 Case study: Amazon, Best Buy, Allegiant Airlines

Class 16-19: Information Value in Supply Chain

Introduce Bullwhip effect, information sharing incentives and VMI; supply chain risk management

2 Case study: Covid 19 and rethinking the medical supply chain

Class 20-21: Lean Production, JIT system

The basic concepts of lean production and JIT system

Case study: Caesars Casinos

Class 22-24: Bizsim Simulation and Project Presentation

1-2 课：供应链管理导论

以苹果公司为例，介绍什么是供应链管理，供应链管理中的关键权衡

课程 2-7：供应链计划和决策分析

供应链规划和决策分析包含三个部分：1) 需求预测； 2) 销售和运营规划以及 3) 网络规划。

第一部分：我们讨论如何使用移动平均、指数平滑和简单回归来预测市场需求。

第二部分：介绍如何确定总体需求计划，以及如何使用物料需求计划来实现总体需求计划，如何确定生产计划的服务水平。

第三部分：介绍与工厂和仓库位置以及分销和采购相关的决策。使用一个简单的线性规划示例来解释如何选择最便宜的仓库来获取需求。使用 Elec Com Case 来描述讲解供应链中的拉（pull）和推（push）系统。

2-7 课程中将包含 2 个 案例研究：Sport Obermeyer Ltd 和 Barilla SpA

（可能涉及的其他主题：项目流程优化）

课程 7-15：供应链合同

供应链合约包含：1) 博弈模型介绍 2) 供应链回购合同 3)供应链收益分享合同 4) 数量灵活合约 5) 渠道选择 6) 智能定价

在这一板块的学习中，我们将基于博弈论框架，介绍不同的供应合同如何协调供应链中的多方以提高供应链整体绩效。

7-15 课程中将包含 3 个案例研究：Amazon, Best Buy, Allegiant Airlines

课程 16-19：供应链中的信息价值

介绍经典的牛鞭效应、信息共享激励和 VMI；供应链风险管理

16-19 课程中将包含 2 案例研究：Covid 19 and rethinking the medical supply chain

课程 20-21：精益生产，JIT 系统

精益生产和 JIT 系统的基本概念

案例研究：凯撒赌场

课堂 22-24：Bizsim 商业模拟实战演练和项目展示

18. 教材及其它参考资料 Textbook and Supplementary Readings

Designing and Managing the Supply Chain: Concepts, Strategies, and Case Studies. 2nd edition, McGraw-Hill, 2009

Operations and Supply Chain Management: The Core, 4th Edition, International Edition, McGraw-Hill.

Operations and Supply Chain Management for MBAs, 7th edition by Meredith and Shafer.

课程评估 ASSESSMENT

19.

评估形式 Type of Assessment	评估时间 Time	占考试总成绩百分比 % of final score	违纪处罚 Penalty	备注 Notes
出勤 Attendance		5		
课堂表现 Participation		10		
小测验 Quiz				
课程项目		30		Case study + Bizsim Simulation
平时作业 Graded Team Assignments		15		
期中考试 Mid-Term Quiz				
期末考试 Final Exam		40		
期末报告				

Final Presentation				
其它（可根据需要改写以上评估方式） Others (The above may be modified as necessary)				

20. **记分方式 GRADING SYSTEM**

☑ A. **十三级等级制 Letter Grading**
☐ B. **二级记分制（通过/不通过） Pass/Fail Grading**

课程审批 REVIEW AND APPROVAL

21. **本课程设置已经过以下责任人/委员会审议通过**
This Course has been approved by the following person or committee of authority

任课教师：

教学主管：