



Lincoln University

BA 215 – Production Management

COURSE SYLLABUS Spring 2025

Instructor: Dr. Walter Kruz, DBA
Lecture Schedule: Weds – 12:30PM to 03:15 PM
Credits: 3 units / 45 lecture hours

Level: Advanced (A)
Office Hours: By appointment.
Contact wrkruz@lincolnuca.edu
Main Textbook: **Automation, Production Systems, and Computer-Integrated Manufacturing** by M. Groover, 5th Ed., Pearson Publishers
Prerequisite: *BA 110, BA 115*
Last Revision: January 2, 2025

CATALOG DESCRIPTION:

A study of operational systems, models and techniques related to production planning and control, methods analysis, cost effectiveness inventory management, work scheduling, wage determination and general organization analysis. *Prerequisite: BA 110, BA 115*

EDUCATIONAL OBJECTIVES

By taking the course, students will learn three basic principles of modern operations management; supply chain management, product and service design, and quality management. Through additional materials and project work, students will become familiar with various industries, technologies, and products of their interest.

COURSE LEARNING OUTCOMES¹

	Course Learning Outcome	Program LO	Institutional LO	Assessment activities
1	Demonstrate an ability to understand and apply the concepts and applications of Operations Management.	PLO 1	ILO 1b, ILO 2b	Homework, participation in the in-class discussions; case studies; quizzes; midterm/final exams
2	Demonstrate essential skills of managing and improving operations decisions in manufacturing and service organizations.	PLO 2	ILO 1b, ILO 2b, ILO 4b	Participation in the in-class discussions; case studies; quizzes;
3	At the end of the course students will be able to demonstrate working knowledge of a variety of methods and tools used in managing and improving operations decisions.	PLO 3	ILO 2b, ILO 7b	Report presentation, course project report; case studies; quizzes;
4	Be able to effectively organize team in working on a project, assign responsibility, delegate and lead.	PLO 5	ILO 4b, ILO 5b	Course report presentation; case studies

INSTRUCTIONAL METHODS**This is a direct classroom instruction course.**

This class offers a highly interactive learning environment. All students will expect to participate in class discussions, research findings, and class exercises. Short oral presentations may be assigned. Assignments may consist of textbook cases and research questions.

Assignments and projects require students to actively use resources of the library. Detailed guide to business *resources of the library* as well as the description of Lincoln University approach to *information literacy* are available at the [LU Library](http://lincolnuca.libguides.com) website (lincolnuca.libguides.com).

CLASS ATTENDANCE

Attendance is a school requirement. Exams may include questions from class discussions.

EXAMS

Typically, the class exams will consist of several exams of equal weight as well as homework and quizzes throughout the sessions. All exams are individual deliverables. These activities enable the student to accumulate points which will be used to calculate grade performance. Exams are designed to demonstrate a student's mastery of concepts being discussed and consist mostly of short answers and calculations related to the material being discussed. The exam format is closed book

¹ Detailed description of learning outcomes and information about the assessment procedure are available at the [Learning Outcomes Assessment](#) section of LU website.

with no electronic devices allowed. Failure to follow exam rules will earn 0 points or “F” grade for that exam.

COURSE REPORT

A report, if assigned, will consist of a written paper summarizing production methods and technologies of interest to the student and agreed with Professor. The report outline will be assigned in class. The completed project document, in M/S Word or PDF format, will be submitted via Canvas or email at a date to be announced in class.

GRADING POLICY

The points needed for securing a given course grade are shown in the table posted below:

Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	F
Points	94-100	90-93	87-89	83-86	80-82	77-79	73-76	70-72	67-69	60-66	0-59

Weights	
Homework	10%
Quizzes	5%
Midterm Exams (20% each) (3 exams)	65%
Industry and Technologies report	20%
Total	100%

PROPOSED CLASS SCHEDULE _BA215

Session	Activity	Assignment (Deliver via Canvas or email)
Session 1	Chapter 1 - Intro to Automation Methods	Answer questions 1-10 from “Discussion and Review questions” at end of chapter.
Session 2	Chapter 2 – Manufacturing Operations	Answer questions 1-10 from “Discussion and Review questions” at end of chapter.
Session 3	Chapter 3 - Manufacturing Metrics	Answer questions 1-10 from “Discussion and Review questions” at end of chapters.
Session 4	Chapter 5 – Control systems	Answer questions 1-10 from “Discussion and Review questions” at end of chapters
Session 5	Exam 1: Chapters 1, 2, 3. And 5	
Session 6	Chapter 5 – Control systems	Answer questions 1-10 from “Discussion and Review questions” at end of chapter.
Session 7	Chapter 6 – Components	Answer questions 1-10 from “Discussion and Review questions” at end of chapter.
Session 8	Chapter 8 – Robotics	Answer questions 1-10 from “Discussion and Review questions” at end of chapter.
Session 9	Special Technology Chapter - Artificial Intelligence in Manufacturing	Review chapter _ Write summary
Session 10	Exam 2: Chapters 5, 6, 8, and AI in Mfg	Answer questions 1-10 from “Discussion and Review questions” at end of chapter.
Session 11	Chapter 13 – Intro Manufacturing Methods	Answer questions 1-10 from “Discussion and Review questions” at end of chapter.
Session 12	Chapter 16 – Transfer lines Chapter 17- Automated Assembly	Answer questions 1-10 from “Discussion and Review questions” at end of chapter.
Session 13	Chapter 16 – Transfer Lines 3 –	Answer questions 1-10 from “Discussion and Review questions” at end of chapter.
Session 14	Special Manufacturing Methods chapter.	Review chapter _ Write summary
Session 15	Exam 3: Chapters 13, 16, 17, and Spec Methods	Technologies Report due

Updated: 1/5/25