

**SYLLABUS
(UACJ EDUCATION MODEL 2020 VISION)**

I. Course Identifiers

College:	Social Sciences and Management College	Method:	Lecture
Department:	Management Sciences Department	Credits:	8
Course Name:	Value and Supply Chain Management	Make-over exam:	Yes
Program:	Business Management	Type:	Core Course
Course Number:	CIA 983414	Kind:	Lecture
Level:	Intermediate	Hours:	64 Hrs.

II. Course Placement

Academic Background:	Principles of Operations Management	Course Number:	CIA 983314
Following Courses:	N / A	Course Number:	N / A

III. Academic Background

Basic Knowledge:

- Of management as a science and conceptualization of the management process including principles, plans, business structures, value and supply chains and the complete operation of an organization.

Skills:

- Be able to work different problems that will help to make an efficient business decision.

Behavior and values:

- Ethical values with respect to the development of assignments, collaboration, respect to the work teams, purposeful attitude of personal advancement and desire to develop projects.

IV. General Purpose Statements

The students will achieve the fundamental competencies of the management of the operations of an organization especially including the concepts of value and supply chains. This course is designed so that the students will know the activities of the operations environment taking into account the dynamic nature of the markets and the sudden changes in the desires and wants of the potential consumers, and in the actions that have to be developed in order to respond to the demand of the international competition.

V. Formative Commitments

Intellectual:

- The student will apply the acquired knowledge in the academic background courses and in the current course to solve problems using analytical, mathematical and statistics models with the purpose of making efficient decisions in the business operations and thus transmitting them to the supply chain.

Human:

- The student will reflect on the ethical implications of the education planning processes so that the requirements are met with equity and social justice.

Social:

- Service commitment, pride of the profession and national culture also encouragement to adapt to a change environment.

Professional:

- Proficient use of software packages, as well as, software to analyze the tools that are used to make decisions. Use of IT.

VI. Operating Conditions

Space: A classroom
25 – 40

Laboratory: N / A

Capacity: students,

Frequent use equipment: Laptop, projector, eraser.

Special conditions: If possible round tables.

VII. Contents and estimated times

Topics	Contents	Activities
<p>1 Supply Chain Management</p> <p>2 sessions (4 hours)</p>	<p>Session 1:</p> <ul style="list-style-type: none"> -The supply chain's strategic importance. -Sourcing issues: make-or-buy vs. outsourcing. -Six sourcing strategies. -Supply chain risk. -Managing the integrated supply chain. <p>Session 2:</p> <ul style="list-style-type: none"> - Building the supply base. - Logistics management. - Distribution management. - Ethics and sustainable supply chain. - Measuring supply chain performance. 	<ul style="list-style-type: none"> -Read all the material in sessions 1 and 2 and study the power points of topic 1. -Class discussion of sessions 1 and 2. -Solution of homework problems of topic 1. -Resolve topic 1 video case study by work teams: Supply Chain Management at Regal marine. -Use of Information Technologies, IT, to work on the case study.
<p>2 Supply Chain Management analytics</p> <p>2 sessions (4 hours)</p>	<p>Session 3:</p> <ul style="list-style-type: none"> - Techniques for evaluating supply chains. - Evaluating disaster risk in the supply chain. - Managing the bullwhip effect. <p>Session 4:</p> <ul style="list-style-type: none"> - Supplier selection analysis. - Transportation mode analysis. 	<ul style="list-style-type: none"> -Read all the material in sessions 3 and 4 and study the power points of topic 2. -Class discussion of sessions 3 and 4. -Solution of homework problems of topic 2. -Start Term Paper research. -Use of Information Technologies, IT, to work on the case study and the term paper research, also apply creativity in the content of the research. <p>-EXAM I. TOPICS 1 AND 2.</p>
<p>3 Forecasting</p> <p>3 sessions (6 hours)</p>	<p>Session 5:</p> <ul style="list-style-type: none"> -What is forecasting? -The strategic importance of forecasting. -Seven steps in the forecasting system. <p>Session 6:</p>	<ul style="list-style-type: none"> -Read all the material in sessions 5, 6 and 7 and study the power points of topic 3. -Class discussion of sessions 5, 6 and 7. -Solution of homework problems of topic 3.

	<ul style="list-style-type: none"> -Forecasting approaches. -Time-series forecasting. -Associative forecasting methods: regression and correlation analysis. <p>Session 7:</p> <ul style="list-style-type: none"> -Monitoring and controlling forecasts. -Forecasting in the service sector. 	<ul style="list-style-type: none"> -Resolve topic 3 video case study by work teams: Forecasting Ticket Revenue for Orlando Magic Basketball Games. -Continue with Term Paper research. -Use of Information Technologies, IT, to work on the case study and the term paper research, also apply creativity in the content of the research.
<p style="text-align: center;">4</p> <p style="text-align: center;">Inventory Management</p> <p>3 sessions (6 hours)</p>	<p>Session 8:</p> <ul style="list-style-type: none"> -The importance of inventory. -Managing inventory. -Inventory models. <p>Session 9:</p> <ul style="list-style-type: none"> - Inventory models for independent demand. - Probabilistic models and safety stock. <p>Session 10:</p> <ul style="list-style-type: none"> - Single-period model. - Fixed-period (P) systems. 	<ul style="list-style-type: none"> - Read all the material in sessions 8, 9 and 10 and study the power points of topic 4. - Class discussion of sessions 8, 9 and 10. - Solution of homework problems of topic 4. - Resolve topic 4 video case study by work teams: “Managing Inventory at Frito-Lay”. - Continue with Term Paper research. - Use of Information Technologies, IT, to work on the case study and the term paper research, also apply creativity in the content of the research. - EXAM II COVERING TOPICS 3 AND 4.
<p style="text-align: center;">5</p> <p style="text-align: center;">Aggregate Planning and S&OP</p> <p>2 sessions (4 hours)</p>	<p>Session 11:</p> <ul style="list-style-type: none"> -The planning process. -Sales and operations planning. -The nature of aggregate planning. -Aggregate planning strategies. <p>Session 12:</p> <ul style="list-style-type: none"> - Methods for aggregate planning. - Aggregate planning in services. 	<ul style="list-style-type: none"> - Read all the material in sessions 11 and 12 and study the power points of topic 5. - Class discussion of sessions 11 and 12. - Solution of homework problems of topic 5. - Resolve topic 5 video case study by work teams: “Using Revenue Management to Set Orlando Magic Ticket Prices”. - Continue with Term Paper research. - Use of Information Technologies, IT, to work on the case study and the term paper research, also apply creativity in the content of the research.
<p style="text-align: center;">6</p> <p style="text-align: center;">Material Requirements Planning (MRP) and ERP</p> <p>4 sessions (8 hours)</p>	<p>Session 13:</p> <ul style="list-style-type: none"> -Dependent demand. -Dependent inventory model requirements. <p>Session 14:</p> <ul style="list-style-type: none"> -MRP structure. -MRP Management. <p>Session 15:</p> <ul style="list-style-type: none"> -Lot-sizing techniques. -Extensions of MRP. <p>Session 16:</p> <ul style="list-style-type: none"> - MRP in services. - Enterprise resource planning (ERP). 	<ul style="list-style-type: none"> - Read all the material in sessions 13, 14, 15 and 16 and study the power points of topic 6. - Class discussion of sessions 13, 14, 15 and 16. - Solution of homework problems of topic 6. - Resolve topic 6 video case study by work teams: “When 18, 500 Orlando Magic Fans Come to Dinner”. - Continue with Term Paper research. - Use of Information Technologies, IT, to work on the case study and the term

		<p>paper research, also apply creativity in the content of the research.</p> <p>- EXAM III COVERING TOPICS 5 AND 6.</p>
<p>7 Short-Term Scheduling</p> <p>3 sessions (6 hours)</p>	<p>Session 17:</p> <ul style="list-style-type: none"> - The importance of short-term scheduling. - Scheduling issues. - Scheduling process-focused facilities. <p>Session 18:</p> <ul style="list-style-type: none"> -Loading jobs. -Sequencing jobs. <p>Session 19:</p> <ul style="list-style-type: none"> -Finite capacity scheduling (FCS). -Scheduling services. 	<ul style="list-style-type: none"> - Read all the material in sessions 17, 18 and 19 and study the power points of topic 7. - Class discussion of sessions 17, 18 and 19. - Solution of homework problems of topic 7. - Resolve topic 7 video case study by work teams: "Scheduling at Hard Rock Café". - Continue with Term Paper research. - Use of Information Technologies, IT, to work on the case study and the term paper research, also apply creativity in the content of the research.
<p>8 JIT, TPS, and lean operations</p> <p>3 sessions (6 hours)</p>	<p>Session 20:</p> <ul style="list-style-type: none"> - Just-in-time, the Toyota production System, and lean operations. - Just-in-time (JIT). <p>Session 21:</p> <ul style="list-style-type: none"> - Toyota Production System. - Lean operations. <p>Session 22:</p> <ul style="list-style-type: none"> - Lean operations in services. 	<ul style="list-style-type: none"> - Read all the material in sessions 20, 21 and 22 and study the power points of topic 8. - Class discussion of sessions 20, 21 and 22. - Solution of homework problems of topic 8. - Resolve topic 8 video case study by work teams: "JIT at Arnold Palmer Hospital". - Continue with Term Paper research. - Use of Information Technologies, IT, to work on the case study and the term paper research, also apply creativity in the content of the research.
<p>9 Maintenance and Reliability</p> <p>2 sessions (4 hours)</p>	<p>Session 23:</p> <ul style="list-style-type: none"> - The strategic importance of maintenance and reliability. - Reliability. <p>Session 24:</p> <ul style="list-style-type: none"> - Maintenance. - Total productive maintenance. 	<ul style="list-style-type: none"> - Read all the material in sessions 23 and 24 and study the power points of topic 9. - Class discussion of sessions 23 and 24. - Solution of homework problems of topic 9. - Resolve topic 9 video case study by work teams: Maintenance Drives Profits at Frito-Lay. - Continue with Term Paper research. - Use of Information Technologies, IT, to work on the case study and the term paper research, also apply creativity in the content of the research. <p>- EXAM IV COVERING TOPICS 7, 8 AND 9.</p>

<p style="text-align: center;">10 Review of Decision Modeling</p> <p>4 sessions (8 hours)</p>	<p>Session 25: - The decision process in operations.</p> <p>Session 26: - Fundamentals of decision making.</p> <p>Session 27: - Decision tables.</p> <p>Session 28: - Types of decision-making environments. - Decision trees.</p>	<ul style="list-style-type: none"> - Read all the material in sessions 25, 26, 27 and 28 and study the power points of topic 10. - Class discussion of sessions 25, 26, 27 and 28. - Solution of homework problems of topic 10. - Resolve topic 10 case study by work teams: Warehouse Tenting at the port of Miami. - Continue with Term Paper research. - Use of Information Technologies, IT, to work on the case study and the term paper research, also apply creativity in the content of the research.
<p>Term Paper</p> <p>4 sessions (8 hours)</p>	<p>Session 29-32: - Research project about a specific topic assigned to work teams.</p>	<p>- Hand in written Term Paper and make a Power Point presentation.</p>

VIII. Methodology and Teaching Strategies

Institutional Methodology:

- Work papers and research consulting bibliographical references, hemereographical and the Internet.
- Reading reports of current and relative articles in English.
- Team work creativity.
- Use of IT

UACJ vision 2020 recommended for the course:

- Empirical approximation to reality.
- Organization and recuperation of information search.
- Horizontal communication.
- Detection.
- Execution.
- Choice decision.
- Evaluation.
- Experimentation.
- Extrapolation and transfer.
- Internalization.
- Research.
- Cognitive.
- Planning, preventing and anticipating.
- Problem oriented.
- Logical and critical process thinking.
- Creative, divergent and literal thinking processes.
- Construction and appropriation procedure.
- Generalizing.
- Collaborative work.

IX. Evaluation and Accreditation Criteria

a) Institutional accreditation:

- Minimum accreditation of 80% of the scheduled on-time delivery of assignments.
- Registration for the course payment.
- Minimum integrated grade of 7.0
- Allows comprehensive semester exam: No

b) Course evaluation:

- Partial exams 30%
- Homework 21%
- Case study 19 %
- Term paper 30 %
- Total 100%

X. Biographical References

Compulsory:

1. Operations Management: Sustainability and Supply Chain Management: Global Edition, Jay Heizer, Barry Render and Chuck Munson. Pearson Education, Twelfth edition, 2017.

Complementary:

1. Administración de Producción y Operaciones: Norman Gaither & Grez Fraizer. Internacional Thomson Editores. Octava Edición
2. Administración de Producción y Operaciones: Richard B. Chase, Nicholas J. Aquilano & F., Mc Graw Hill. Octava, Edición 2000.
3. Administración de Operaciones: Roger G. Schroeder. Mc Graw Hill. Segunda Edición
4. Administración de Producción y Operaciones: Norman Gaither & Grez Frazier. Inter. Thomson Editores, octava Edición 2000
5. La meta: Eliyahu Goldratt

XI. Desirable Teacher Qualifications

Industrial engineer with an MBA also a Certified Teacher. With experience in the operations area.

XIII. Institutional

Department head: Mtra. Laura Estela Anguiano Herrera
 Business Management Program Coordinator: Dra. Josefa Melgar Bayardo
 Developed by: Mtro. Ignacio Francisco Romero Magaña
 Date: April 2015
 Revised: October 2016