

Supply Chain Management Course Number: 33:799:450 Course Title: Fundamentals of Supply Chain Solutions with SAP

COURSE DESCRIPTION

Course Description:

This course provides a technical overview of Enterprise Resource Planning (ERP) Systems and their role within an organization. It examines the benefits of implementing an ERP system, explores its essential terminology, and investigates the guidelines for ERP system implementation and application. The course examines the various key supply chain business processes, such as Plan, Source, Make, and Deliver. Also, these processes will be examined within the context of their impact on financial accounting, managerial accounting, and inventory management. In addition, particular attention will be given to the necessary integration of these various business processes.

Course Modality / Meeting Location & Times:

Modality

This course is delivered in an "in-person" synchronous mode of instruction; although, some classroom discussion and access to materials can be found online in Canvas.

To access the companion Canvas course site, please visit Rutgers Canvas at https://canvas.rutgers.edu/and log in using your NetID. For more information about course access and support contact Canvas Help at https://canvas.rutgers.edu/canvas-help/, via email at help@canvas.rutgers.edu, or call 877-361-1134.

Purpose of the Course:

This course is designed to help students develop practical skills and knowledge of ERP systems/solutions and help students understand how these systems enable supply chain management business processes. More detail can be found in the "Learning Objectives" section of this Syllabus.

It is important to note that this is NOT an "SAP" training course. It is a "supply chain business process" course focused on an enabling technology, which happens to be via an ERP system, such as SAP. Although, you will obtain "hands-on" SAP experience.

COURSE MATERIALS

Learning Management System: Canvas

Optional Textbook:

(Online Book and Videos):

• Title: Business Process Integration with SAP S/4HANA

Author/Publisher: Epistemy Press,
Publication Date: June 1st, 2020

• **ISBN-13:** 9780997209235

• **Price**: \$50.00

• Source (to purchase access): https://courses.epistemypress.com/

You will also need access to a computer (preferably a laptop on which you can install SAP software and complete assignments (note: a PC –vs. MAC- is highly preferred for this course).

Additional Course Resources:

- Powerpoint presentation and recordings (if applicable) will be reviewed and discussed in class and will also be provided to students through Canvas.
- Other course materials, such as articles and videos, may also be provided to students through Canvas.
- Check **Canvas** and your **official Rutgers email account** regularly (daily is recommended) for updates and announcements.

In addition, the course content will include additional reading materials, including but not limited to case studies, assessment materials, desktop tools, references, and sample documents.

A variety of printed and digital content may be provided during the course. Digital content will be found within the **Canvas course site**. There may be additional reading assignments as student interests dictate.

STUDENT LEARNING OBJECTIVES

By fully participating in this course, you should be able to:

- 1. Describe business functional areas and associated key business processes.
- 2. Understand the cross-functional nature of these business processes and their relationship to organizational areas.
- 3. Master the basic concepts, architecture and terminology associated with an ERP system.
- 4. Understand how ERP systems are used to optimize business processes.
- 5. Illustrate how integrated information systems can help a company prosper by providing business managers with accurate, consistent, and current data.
- 6. Obtain experience working with an ERP system_by executing key transactions within various modules of SAP software: Sales and Distribution (SD), Materials Management (MM), Production Planning (PP), Financial Accounting (FI) and Controlling (CO).

TEACHING PROCEDURES

During the course, you will be required to carefully read/review the required posted material (e.g. online book chapters, Powerpoint slides, recordings, articles, etc.) and be actively engaged in the Discussion forum within Canyas.

Teaching Philosophy:

I believe that it is my responsibility as a teacher to provide students with the following:

- o an environment conducive to learning,
- o knowledge that will help them be successful in achieving their lives' goals,
- o materials, opportunities, and feedback that will help them learn, and

o help in becoming and remaining motivated to be successful both in their studies and in applying their knowledge to solve problems in their lives.

I also believe that my students have duties to me, to their fellow students, and to themselves. I believe that these duties support me in fulfilling my duties to students. Thus, I believe that it is the students' responsibility to be supportive of the teacher and fellow students by being:

- o tolerant of different points of view,
- o prepared for class,
- o willing to work hard to complete course activities,
- o willing to bring their life experiences into the class to enrich discussions, and Instructor
- o willing to try to apply what they learn in class to solve the problems they face on their jobs and in their lives.

ACADEMIC INTEGRITY

I do NOT *tolerate cheating*. Students are responsible for understanding the RU Academic Integrity Policy (http://academicintegrity.rutgers.edu/)

I will strongly enforce this Policy and pursue *all* violations. On all examinations and assignments, students must sign the RU Honor Pledge, which states, "On my honor, I have neither received nor given any unauthorized assistance on this examination or assignment." I will screen all written assignments through *SafeAssign* or *Turnitin*, plagiarism detection services that compare the work against a large database of past work. Don't let cheating destroy your hard-earned opportunity to learn. See business.rutgers.edu/ai for more details.

COURSE COMPLETION REQUIREMENTS

Your success in this course depends on the following:

Class Attendance and Participation / Discussion Forum Post Requirements:

You are required to attend class.

For your "participation" grade, you will be graded on your response to Discussion Questions, which will be posted in the "Discussion" board within Canvas throughout the semester. The discussion question will relate directly to the material covered during the specified week.

Specifically, you are required to:

• Carefully read the discussion question and associated material(s), if applicable.

- Provide a comprehensive response of 100-150 words (guideline) to the discussion question. For example, if you make an observation regarding what you have read, follow this up with your own analysis of the information as you understand it.
- The initial post must be posted in Canvas no later than following class.
- Reply to at least two classmates' posts. Your response to your classmate's discussion should be around 50 words (each) and add to the discussion (i.e. reflecting on their response, asking questions, etc.).
- Your responses MUST be posted by no later than of the following week the Discussion question was provided.

In your communication with other students, please:

- Expand on or clarify an important point.
- Offer an additional argument to support a position taken in an answer.
- Suggest ways in which an idea could be more clearly expressed.
- Identify passages where you think the writer misunderstood a concept or applied it incorrectly.
- Disagree with a point or position made in an answer.

If you disagree with the views of another student, please:

- Be constructive and respectful.
- Politely critique a position on an issue, but not the person.
- Avoid sarcasm, swearing, or language that would be considered rude or argumentative.
- State precisely the point you disagree with.
- Offer reasons why you think their view is incorrect and support your position by citing the text or other sources.

IMPORTANT: You must meet ALL requirements for posting (i.e. comprehensive posts; response to at least two other students' posts; and, meet deadlines for initial post and response posts) in order to receive full credit for discussion question for the week. There are no exceptions!

Also, do not wait until the last minute to post to Discussions! Posting early allows you to write thoughtful answers and to be the first one to make important points. Posting early also ensures that you will not miss deadlines

Assignments:

Case Study Analysis

One (1) case study will be assigned for your review and analysis. Each student will carefully analyze the case study and produce formal paper (letter size paper, 1.5-lines spaced, Times New Roman, 12 pt. font, and preferably no more than 5 pages excluding a title page, reference page, etc.) analyzing the case, which will be submitted via Canvas.

The paper will include (but is not limited to) the following:

- a brief recap of the case
- your interpretation of the case
- your learnings and takeaways from the case
- your recommendations (as if you were a consultant to this organization)

Practice Labs

An important component of this course is the "Practice Lab," which are exercises that allow you to gain practical experience in the SAP system. There are five (5) Practice Lab exercises, whereby you will be using SAP S/4 HANA in these labs. The lab assignments are simply exercises that you complete directly in the SAP system. You will work on the exercises until the due date specified in Canvas.

The Practice Lab will include specific instructions on how to execute transactions associated with each business process module covered in the course. As part of the instructions, you will need to respond to questions and submit the document via Canvas upon completion of the assignment.

As you complete the transactions in SAP, you will develop a brief summary of the business processes you have performed in the system. For this summary, you will need to describe the action steps you took to complete the business process(es). You can use the lecture notes to assist in the development of your summary. This is the ONLY deliverable you need to upload into Canvas. I will be able to view your completed transactions in the system.

You will receive feedback and a score for each lab completed based on your results. I will be able to review your performance in SAP.

You should allocate 2 to 3 hours for each lab exercise. Although, initially, the exercises may take longer to complete. Also, **you are NOT required to complete the "Challenge"** at the very end of each lab exercise.

Team Research Project/Presentation

You will engage in a small group project/presentation with details as follows:

Any topic related to the course contents is acceptable, such as case studies, content summaries, and implementation plans

- Groups of three (3) to six (5) students each will be assigned to a team. Student teams will be posted along with email contact information in Canvas near the beginning of the semester. Students are responsible to check to see to which team they are assigned
- Each team will prepare a 15-20 minute presentation (with no more than ten slides excluding the title page) outlining and discussing the chosen topic.
- Teams will present "live" in class and submit their final versions via Canvas
- The project score is determined by the creativity of the topic, the quality of work and the effectiveness of presentation (clarity, time control, engagement, team work, Q&A, etc.). A rubric for this assignment is provided to students for their guidance.
- All students are required to participate in researching, developing, and presenting to receive full credit for participation on this project.
- Student teams are expected to organize themselves to complete this assignment.
- Students who fail to participate in the Team Project/Presentation will receive a 0% for their Small Group Project grade.
- Only one team member will be responsible for posting the presentation in Canvas.

If you have any questions or concerns about this assignment, please make sure to see me at the beginning of the semester.

Topics presented in previous classes include:

- Company Case Studies
- Company Partnerships e.g. Apple and SAP
- Adjacent Technologies e.g. Blockchain

Integration Lab

The objective of the Integration Lab is to connect all the components learned in class through your Practice Labs. You will be provided a final Practice Lab, whereby you will conduct various transactions on sales planning, production planning, procurement, production control, inventory management, and sales and delivery in SAP. The Integrated Lab will be similar to your Practice Lab activity.

Knowledge Tests

There will be two (2) closed book knowledge tests, which will be administered in the classroom. The first test will cover all information covered to-date and the second test will not be cumulative. Here are the dates for the tests:

- Knowledge Test #1 (IN-CLASS) –
- Knowledge Test #2 (ONLINE) –

There will be no make-up unless a special event out of your control (e.g., a medical emergency) happens and prevents you from attending the in-class test. In such cases, you must notify the instructor as soon as you can and provide necessary documentations (e.g., a doctor's note).

GRADING POLICY

Final Course Grade:

Grades in this course are weighted according to the table below.

Item	% of Total
Class Participation (Discussion Forum)	10%
Case Study Analysis (1)	10%
Practice Labs (5 @ 4 points each)	20%
Team Research Project/Presentation (1)	10%
Integration Lab (1)	10%
Knowledge Tests (2)	40%
Total:	100%

Grading Scale:

Grade	Range
A	90-100
B+	87 - 89

В	80 -86
C+	77 - 79
С	70 - 76
D	60 - 69
F	60 and Below

ACADEMIC POLICIES AND PROCEDURES

Attendance Policy:

- Students are expected to actively participate in the Discussion forum.
- Students are not required to attend synchronous sessions. However, if students plan to attend, I expect students to be on-time.
- If for any reason I am to be absent for a synchronous session, my department chair or I will send you notice via email and Canvas as far in advance as possible with appropriate information and instructions.

 When you arrive in the online classroom, please ensure you are on "Mute" to avoid any interference.

You are responsible for material covered in the online classroom each week. If you have a situation that might cause you to miss an entire week of class, discuss it with me *as soon as possible*.

Submission Policy:

I do NOT tolerate cheating. Students are responsible for understanding the RU Academic Integrity Policy I will strongly enforce this Policy and pursue *all* violations. I will screen all written assignments through *SafeAssign* or *Turnitin*, plagiarism detection services that compare the work against a large database of past work. Don't let cheating destroy your hard-earned opportunity to learn.

Late Work:

Late work will not be accepted unless it is an absolute emergency.

Coursework Difficulties:

Please discuss any issues that you are having in completing the coursework on time with me. I am available to talk this over with you by appointment.

Incomplete Policy:

If you are unable to complete the coursework during the semester due to some catastrophic issue, you must contact me immediately to discuss your alternatives.

COURSE SCHEDULE

Week 1:

Category	Description
Core Topic(s)	Course Overview & Introductions

Core Topic(s)	Introduction to SCM, ERP, and SAP
Learning Objectives	At the end of this week you will: • Understand the importance of ERP systems • Be provided with background on SAP and S/4 HANA, in particular
Readings/Media	 Lecture Presentation (Powerpoint) Additional Readings, if applicable (see Canvas)
Assignments	No assignments this week

Category	Description
Core Topic(s)	SAP Systems Architecture Organization Structure
Core Topic(s)	SAP Self-Installation
Learning Objectives	At the end of this week you will: • Understand how the SAP system is structured and organized
Readings/Media	Lecture Presentation (Powerpoint)Additional Readings, if applicable (see Canvas)
Assignments	• Discussion Question #1 – initial post due and reply posts (2) due
Category	Description
	• Install SAP on your computer (detailed instructions can be found in Canvas)

Category	Description
Core Topic(s)	SAP S/4 HANA Navigation Fitter Snacker Overview

Core Topic(s)	Pre-Lab Activity – Self-Navigation
Learning Objectives	At the end of this week you will: • Gain access to SAP • Learn how to navigate the SAP system • Learn about the fictitious company, Fitter Snacker
Readings/Media	 Lecture Presentation (Powerpoint) Additional Readings, if applicable (see Canvas)
Assignments	 Discussion Question #2 – initial post due and reply posts (2) Pre-Lab Activity: Practice - Navigation Exercise Assigned (Not Graded) – opens

Category	Description
Core Topic(s)	• Master Data Overview – Pt 1
Core Topic(s)	• Master Data Overview – Pt 2
Learning Objectives	At the end of this week you will:
Category	Description
	 Understand the purpose and importance of Master Data and its relevance in SAP Gain hands-on experience in identifying Master Data in SAP
Readings/Media	Lecture Presentation (Powerpoint)Additional Readings, if applicable (see Canvas)
Assignments	 Discussion Question #3 – initial post due and reply posts (2) Case Study Analysis – opens

Week 5

Category	Description
Core Topic(s)	Sales & Distribution (SD) / Sales Order Process
Core Topic(s)	Independent Lab Activity
Learning Objectives	At the end of this week you will: • Learn about how the sales and distribution activity within an organization is managed in SAP • Gain hands-on experience in order processing (for finished goods) in SAP
Readings/Media	Lecture Presentation (Powerpoint)Additional Readings, if applicable (see Canvas)
Assignments	 Discussion Question #4 – initial post due and reply posts (2) Lab Activity #1 – Sales Order Process opens

Category	Description
Core Topic(s)	Financial Accounting & Controlling (FICO) / Accounting Introduction
Category	Description
Core Topic(s)	Independent Lab Activity
Learning Objectives	At the end of this week you will be able to: • Learn about how financial conditions of a company are managed in the market • Understand the cost elements associated with business operations and how those elements are processed in SAP • Gain hands-on experience in the transactions associated with FI and CO
Readings/Media	Lecture Presentation (Powerpoint)Additional Readings, if applicable (see Canvas)

due
,2)

Category	Description			
Core Topic(s)	Materials Management (MM) / Purchasing Process			
Core Topic(s)	Independent Lab Activity			
Learning Objectives	At the end of this week you will: • Learn about how materials are purchased from suppliers and managed within a production facility • Gain hands-on experience in managing raw materials in SAP			
Readings/Media	Lecture Presentation (Powerpoint)Additional Readings, if applicable (see Canvas)			
Assignments	 Discussion Question #6 – initial post due and reply posts (2) Lab Activity #3 – Purchasing Process opens 			

Category	Description			
Core Topic(s)	• Knowledge Test #1 - Review			
Core Topic(s)	• Knowledge Test #1 (Intro, Master Data, SD, FI/CO, MM)			
Learning Objectives	At the end of this week you will: • N/A			
Readings/Media	• N/A			
Assignments	• Knowledge Test #1 (Intro, Master Data, SD, FI/CO, MM)			

(NO CLASSES)

Week 9

Category	Description				
Core Topic(s)	Production Planning (PP) / MRP & Production Order Process				
Core Topic(s)	Independent Lab Activity				
Learning Objectives	At the end of this week you will: • Learn about how the production process is managed within SAP – especially as it relates to conversion of raw materials into finished goods • Gain hands-on experience in converting raw materials into finished product within SAP				
Readings/Media	• Lecture Presentation (Powerpoint)				
Category	Description				
	Additional Readings, if applicable (see Canvas)				
Assignments	 Discussion Question #7 – initial post due and reply posts (2) due Lab Activity #4 - MRP opens 				

Category	Description			
Core Topic(s)	Inventory Management and Warehouse Management (WM)			
Core Topic(s)	Independent Lab Activity			

Learning Objectives	At the end of this week you will: Understand the importance and relevance of inventory management Learn about warehouse management processes and relevant data associated with warehouse management	
Readings/Media	Additional Readings, if applicable (see Canvas)	
Assignments	 Discussion Question #8 – initial post due and reply posts (2) due Lab Activity #5 – Production Order Process opens 	

Category	Description			
Core Topic(s)	Supply Chain Integration			
Core Topic(s)	Work on Team Presentations			
Category	Description			
Learning Objectives	At the end of this week you will: • Learn about real-world supply chain projects where SAP is in scope • Learn about how the various supply chain business processes are integrated			
Readings/Media	 Lecture Presentation (Powerpoint) - SC Integration Additional Readings, if applicable (see Canvas) 			
	• Discussion Question #9 – initial post due and reply posts (2) due			

Category	Description			
Core Topic(s)	• Knowledge Test #2 – Review - RECORDING			
Core Topic(s)	• Knowledge Test #2 (PP, WM, Integration) - ONLINE			

Learning Objectives	At the end of this week you will: • Test your knowledge of the concepts throughout the course		
Readings/Media	• N/A		
Assignments	 Knowledge Test #2 (SD, PP, WM, Integration) / Test will open on y, in Canvas (under Quizzes) and close Discussion Question #10 – initial post due, reply posts (2) due 		

Category	Description			
Core Topic(s)	Explore OpenSAPFiori			
Category	Description			
Core Topic(s)	Guest Speaker Recording			
Learning Objectives	At the end of this week you will: • N/A			
Readings/Media	• N/A			
Assignments	Integration Lab opens			

Category	Description			
Core Topic(s)	Team Presentations			
Core Topic(s)	Team Presentations			

Learning Objectives	At the end of this week you will: • Learn about various ERP systems and adjacent technologies via team presentations	
Readings/Media	• None	
Assignments	 Integration Lab – due Team Presentations – presentations will be held during class 	

ASSESSMENT RUBRICS Discussion Rubric

Guideline for Grading Discussions

Criteria	Outstanding (3)	Proficient (2)	Basic (1)	Below Expectations (0)
Critical Thinking	Substantive contentFull of thought, insight, and analysis	Substantial informationThought, insight, and analysis has taken place	Generally competentInformation is thin and commonplace	Rudimentary and superficialNo analysis or insight is displayed
Connections	Clear connections: To previous or current threads To real-life situations	New ideas or connectionsLack depth and/or detail	Limited, if any connectionsVague generalities	No connections are madeOff topic
Uniqueness	New ideasNew connectionsMade with depth and detail	New ideas or connectionsLack depth and/or detail	 Few, if any new ideas or connections Rehash or summarize other postings 	No new ideas"I agree with"statement
Timeliness	 All required postings Early in discussion Throughout the discussion	 All required postings Some not in time for others to read and respond 	 All required postings Most at the last minute without allowing for response time 	☐ Some, or all, required postings missing
Stylistics	☐ Few grammatical or stylistic errors	☐ Several grammatical or stylistic errors	 Obvious grammatical or stylistic errors Errors interfere with content 	Obvious grammatical or stylistic errorsUnderstanding impossible

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SUPPORT SERVICES

If you need accommodation for a *disability*, obtain a Letter of Accommodation from the Office of Disability Services. The Office of Disability Services at Rutgers, The State University of New Jersey, provides student-centered and student-inclusive programming in compliance with the Americans with Disabilities Act of 1990, the Americans with Disabilities Act Amendments of 2008, Section 504 of the Rehabilitation Act of 1973, Section 508 of the Rehabilitation Act of 1998, and the New Jersey Law Against Discrimination. More information can be found at <u>ods.rutgers.edu</u>.

[Rutgers University-New Brunswick ODS phone (848)445-6800 or email dsoffice@echo.rutgers.edu]

[Rutgers University-Newark ODS phone (973)353-5375 or email ods@newark.rutgers.edu]

If you are *pregnant*, the Office of Title IX and ADA Compliance is available to assist with any concerns or potential accommodations related to pregnancy.

[Rutgers University-New Brunswick Title IX Coordinator phone (848)932-8200 or email jackie.moran@rutgers.edu]

[Rutgers University-Newark Office of Title IX and ADA Compliance phone (973)353-1906 or email <u>TitleIX@newark.rutgers.edu</u>]

If you seek *religious accommodations*, the Office of the Dean of Students is available to verify absences for religious observance, as needed.

[Rutgers University-New Brunswick Dean of Students phone (848)932-2300 or email deanofstudents@echo.rutgers.edu]

[Rutgers University-Newark Dean of Students phone (973)353-5063 or email DeanofStudents@newark.rutgers.edu]

If you have experienced any form of *gender or sex-based discrimination or harassment*, including sexual assault, sexual harassment, relationship violence, or stalking, the Office for Violence Prevention and Victim Assistance provides help and support. More information can be found at http://vpva.rutgers.edu/.

[Rutgers University-New Brunswick incident report link: http://studentconduct.rutgers.edu/concern/. You may contact the Office for Violence Prevention and Victim Assistance at (848)932-1181]

[Rutgers University-Newark incident report link:

https://cm.maxient.com/reportingform.php?RutgersUniv&layout_id=7. You may also contact the Office of Title IX and ADA Compliance at (973)353-1906 or email at TitleIX@newark.rutgers.edu. If you wish

to speak with a staff member who is confidential and does **not** have a reporting responsibility, you may contact the Office for Violence Prevention and Victim Assistance at (973)353-1918 or email run.vpva@rutgers.edu]

If students who have experienced a temporary condition or injury that is adversely affecting their ability to fully participate, you should submit a request via https://temporaryconditions.rutgers.edu.

If you are a military *veteran* or are on active military duty, you can obtain support through the Office of Veteran and Military Programs and Services. http://veterans.rutgers.edu/

If you are in need of *mental health* services, please use our readily available services.

[Rutgers University-Newark Counseling Center: http://counseling.newark.rutgers.edu/]

[Rutgers Counseling and Psychological Services–New Brunswick: http://rhscaps.rutgers.edu/]

If you are in need of *physical health* services, please use our readily available services.

[Rutgers Health Services – Newark: http://health.newark.rutgers.edu/]

[Rutgers Health Services – New Brunswick: http://health.rutgers.edu/]

If you are in need of *legal* services, please use our readily available services: http://rusls.rutgers.edu/

Students experiencing difficulty in courses due to *English as a second language (ESL)* should contact the Program in American Language Studies for supports.

[Rutgers-Newark: PALS@newark.rutgers.edu]

[Rutgers-New Brunswick: eslpals@english.rutgers.edu]

If you are in need of additional *academic assistance*, please use our readily available services.

[Rutgers University-Newark Learning Center: http://www.ncas.rutgers.edu/rlc

[Rutgers University-Newark Writing Center: http://www.ncas.rutgers.edu/writingcenter]

[Rutgers University-New Brunswick Learning Center: https://rlc.rutgers.edu/]

[Optional items that many faculty include:

- Students must sign, date, and return a statement declaring that they understand the RU Academic Integrity Policy.
- Students must sign, date, and return a statement declaring that they understand this syllabus.]