

**Business Analytics and Information Technology**  
**Course Number: 33:136:455**  
**Course Title: Introduction to Enterprise Resource Planning (ERP)**

**COURSE DESCRIPTION**

This course introduces **Enterprise Resource Planning (ERP) systems** and addresses how enterprise information systems are integrated and facilitate to improve business operations. This is a comprehensive course with an emphasis on **hands-on** experience of **Introduction to SAP S/4HANA Next Generation Business Suite and exposure to Oracle E-Business Suite**. We will accomplish multiple objectives:

Objectives	Medium
<p><i>Understand:</i></p> <ul style="list-style-type: none"> <li>• Functional business domains and associated business processes</li> <li>• Business problems inherent in unintegrated information systems</li> <li>• ERP systems as a solution to various business problems and challenges</li> <li>• Overview of marketing, operations management, accounting, etc.</li> </ul>	Lectures
<p>Obtain <b>hands-on training</b> by using various modules of <b>to SAP S/4HANA Next Generation Business Suite</b></p> <ol style="list-style-type: none"> <li>1. Sales and Distribution (SD),</li> <li>2. Materials Management (MM),</li> <li>3. Production Planning (PP),</li> <li>4. Financial Accounting (FI),</li> <li>5. Human Capital Management (HCM)</li> <li>6. Business Warehouse (BW)</li> </ol>	Labs
<p><b>Case Study:</b> We will be doing a case study on the Global Bike Incorporated specializes in deliver innovative high-performance bicycles to the world’s most demanding riders. Global Bike produces bikes for the most demanding competitors—whether the competition is on pavement or dirt, for money, fame or just bragging rights. In 2001, Heidelberg Composites and Frankenstein Bikes merged to form Global Bike Incorporated. Today, John and Peter share the responsibilities for managing Global Bike’s growing organization as co-CEOs. John is responsible for sales, marketing, service &amp; support, IT, finance and human resources groups and Peter is responsible for research, design, procurement and</p>	Case Study – Business of Choice

manufacturing groups from an organizational reporting perspective. During courses we will identify current challenges the Global bikes is facing and address it with providing a comprehensive solution to Global Bike Inc by using full ERP capabilities.	
--	--

---

## COURSE MATERIALS

Book: Integrated Business Processes with ERP System, Simha R. Magal & Jeffery Word, Course Technology Course Packet: Lecture slides and instructions for the labs– posted on Rutgers canvas

**Lectures:** The presentation for the course’s material will be posted on the canvas and lectures are based on the core concept of the ERP

**LABS:** Individual lab assignments will be completed during class sessions to learn hands-on skills of using various SAP modules.

(1) Lab instructions

(a) Lab instructions are in the course packet.

(b) Assignment questions of each lab will be distributed at the beginning of the lab.

**Team Project:** Digital economics the digital transformation of global business and emerging technology. Small group of teams will be created and assign to explore the digital transformation of any technology or the business of their choice. They will do extensive research in technology or business of their choice and will present their research/case and conclusion to the class.

(2) Class sessions

(a) You will have one class sessions per week.

(b) It is expected that most students will be able to complete each lab during designated class sessions.

(3) Lab reports and grading

(a) Each lab report must be submitted to be eligible to receive a grade.

(b) Late submissions

(i) To prevent the situation that some students use the current lab time to do a previous lab, the due time of all lab reports will be before the beginning of the next class session. All lab reports submitted after the due day will be regarded as late submissions.

(ii) Late submissions of lab reports will be penalized by deducting 10 points (for each lab) for each day (24 hours) late.

**EXAMS:** There will be one lab exam, Team Project and Final written Exam

○ Lab Exams: The lab exam tests the lab materials.

○ Team Project: Team research project and presentation

○ Final Exam: The written exam covers class lectures and required readings.

○ **Schedule:** You must take exams at the scheduled times. ***No early or late exam will be permitted.***

Check Canvas ([canvas.rutgers.edu](https://canvas.rutgers.edu)) and your official Rutgers email account regularly.

---

## LEARNING GOALS AND OBJECTIVES

This course is designed to help students develop skills and knowledge in how the enterprise operates and help them understand different business processes and their dependencies with providing them with hands-on experiences in ERP application like SAP S/4HANA Next Generation Business Suite.

We will be covering each aspect of the enterprise like Sales & Distribution, Material Management, Production Planning, Finance, Controlling, Human Capital Management, Warehouse Management, Project Systems and Enterprise Asset Management

- Students who complete this course will demonstrate the following: Upon completion of this course the student will be able to have clear understanding of the complex and integrated business processes. They will get a thoughtful insight of each business area and how they depend on each other for the flow of information. This helps them understand how these ERP applications were developed and is being used to manage the enterprise and run business smoothly and Executive team rely on these applications for them to take informed decision on time to add to the strategic growth of the organization. The Auditing firm also rely on these ERP applications.

Student will accomplish upon the completion of this course

- ✓ Concept of ERP and Integrated Business Processes with ERP system
- ✓ Hands on session on in SAP S/4HANA Next Generation Business Suite.
- ✓ Different functional areas knowledge within the Enterprise
- ✓ Team exercise in working on Digital Transformation project
- ✓ Exposure to the High-Level Project management concepts and Ms Project

- Students develop these excellent understanding of the ERP application and their core integrated business process throughout the courses, we will take a case study and discuss it throughout the program, the main focus for the case study will be to analysis are current business process the business of our choice has, how they are integrated to each other, We will also do a gap analysis and recommend an ERP application to enhance the user experience and provide with them efficiencies. All this will be achieved through the following course activities and assignments:

**LABS:** Individual lab assignments will be completed during class sessions to learn hands-on skills of using various SAP modules.

(4) Lab instructions

- (a) Lab instructions are in the course packet.
- (b) Assignment questions of each lab will be distributed at the beginning of the lab.

**Team Project:** Digital economics the digital transformation of global business and emerging technology. Small group of teams will be created and assign to explore the digital transformation of any technology or the business of their choice. They will do extensive research in technology or business of their choice and will present their research/case and conclusion to the class. Ms Project will be used to manage the project through the team. Student will also get some exposure how projects are managed through Ms Project.

**Team Presentation:** There will be team presentation on some topic related to the course

---

## PREREQUISITES

Students should be having some exposure to technology and final year student are preferred for this course, it is desire if students have some prior work experience and student should be very focus and ready to take on challenges

---

### **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](http://business.rutgers.edu/ai) for more details.

---

### **ATTENDANCE AND PREPARATION POLICY**

- Expect me to attend all class sessions. I expect the same of you. If I am to be absent, my department chair or I will send you notice via email and Canvas as far in advance as possible. If you are to be absent, report your absence in advance at <https://sims.rutgers.edu/ssra/>. If your absence is due to religious observance, a Rutgers-approved activity, illness, or family emergency/death and you seek makeup work, also send [me/TA] an email with full details and supporting documentation [within 5 days of your first absence]. [Explain other aspects of your absence policy in detail; it will save you trouble later.]
  - For weather emergencies, consult the campus home page. If the campus is open, class will be held.
  - Expect me to arrive on time for each class session. I expect the same of you. [If you are going to be tardy, then please notify the TA or me.
  - Expect me to remain for the entirety of each class session. I expect the same of you. [If you are going to leave early, then please notify the TA or me.
  - Expect me to prepare properly for each class session. I expect the same of you. Complete all background reading and assignments. You cannot learn if you are not prepared. The minimum expectation is that for each 3-hour class session, you have prepared by studying for at least twice as many hours.
  - Expect me to participate fully in each class session. I expect the same of you. Stay focused and involved. You cannot learn if you are not paying attention.
- 

### **CLASSROOM CONDUCT**

Students are not be allowed to use the cellphone during the lectures, no side talk are permitted, please raise hands for asking question. Please take permission if plan to leave the class early. Sleeping in class is not allowed. Please be very specific and clear as possible

---

## EXAM DATES AND POLICIES

There will be one lab exam, Team Project and Final written Exam

- Lab Exams: The lab exam tests the lab materials.
- Team Project: Team research project and presentation
- Final Exam: The written exam covers class lectures and required readings.
- **Schedule:** You must take exams at the scheduled times. **No early or late exam will be permitted.**

**During exams, the following rules apply:**

- No cell phones or other electronics are allowed in the testing room.
- You must show a valid Rutgers photo ID to enter the room and to turn in the exam.
- Alternate seating; do not sit next to another student or in your usual seat.
- Use the bathroom prior to the exam start; bathroom breaks, if essential, will be escorted.

---

## GRADING POLICY

Course grades are determined as follows:

- Extra credit: No Extra Credit in this program
- Grade distribution detail:

GRADE DISTRIBUTION		
Labs (1-6 labs) 50 points each	30%	300
Team Project	10%	100
Lab Exam	25%	250
Final Exams	30%	300
Attendance	5%	50
<b>Total</b>	<b>100%</b>	<b>1000</b>

- Grade posting: I will you post the grades on the Canvas
- Grade grubbing: Your final grade is not subject to negotiation. If you feel I have made an error, submit your written argument to me within one week of receiving your final grade. Clarify the precise error I made and provide all due supporting documentation. If I have made an error, I will gladly correct it. But I will adjust grades only if I have made an error. I cannot and will not adjust grades based on consequences, such as hurt pride, lost scholarships, lost tuition reimbursement, lost job opportunities, or dismissals. Do not ask me to do so. It is dishonest to attempt to influence faculty/me in an effort to obtain a grade that you did not earn, and it will not work.]

**GRADING:** Each lab will be weighted equally. Letter grades will be assigned as follows:

Marks	0-60	61-70	71-75	76-80	81-85	86-90	91-100
Letter Grades	F	D	C	C+	B	B+	A

---

## COURSE SCHEDULE

Week	Topic	Reading Required
Week1	Lecture – Chapter-1: Introduction to business Processes	Chapter 1
Week2	Lecture- Chapter-2: Introduction to Enterprise Systems Lab-SAP Navigation	Chapter 2
Week3	Lecture & Lab 1- Chapter-3: Introduction to Accounting	Chapter 3
Week4	Lecture & Lab 2- Chapter-4: The Procurement Process	Chapter 4
Week5	Lecture & Lab 3- Chapter-5: The Fulfillment Process	Chapter 5
Week6	Lecture & Lab 4- Chapter-6: The Production Process	Chapter 6
Week7	Lecture & Lab 5- Chapter-7: The Inventory and Warehouse Management Process	Chapter 7
Week8	NO CLASS	
Week9	NO CLASS	
Week10	Lecture & Lab 6-Chapter-8: The Material Planning Process	Chapter 8
Week11	Lecture – Chapter-9 Process Integration	Chapter 9
Week12	Team Project Discussion	Project Plan Review
Week13	Team Project Presentation	
Week14	Lab & Exam Review	
Week15	Lab Exam	All Labs 1-6
Week16	Final Exam	All Chapters 1-9 (In-class)

---

## 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 [ods.rutgers.edu](http://ods.rutgers.edu).

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

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

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

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](mailto:deanofstudents@echo.rutgers.edu)]

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

[Rutgers–New Brunswick: [eslpals@english.rutgers.edu](mailto: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.]