

**New Jersey Institute of Technology College of  
Computing Sciences**

Course Title: <b>Business Process Innovation</b>	<i>Richard Egan, PhD,</i> <a href="mailto:egan@njit.edu">egan@njit.edu</a> 973 596 – DoNotCall <a href="http://Web.njit.edu/~egan">Web.njit.edu/~egan</a>
Course Number: <b>IS684</b>	Prerequisites/Required Background: <b>IC 663 or CS 673</b>
Course Website: <a href="http://www.moodle.njit.edu">www.moodle.njit.edu</a>	Office hours are listed on my website or by appointment.
Catalog Information: <a href="http://catalog.njit.edu/graduate/computing-sciences/information-systems/#coursestext">http://catalog.njit.edu/graduate/computing-sciences/information-systems/#coursestext</a>	

## **Description**

Enterprise business processes are the **end-to-end** collections of work activities that create and deliver value to customers. Examples of business processes are order fulfillment, new product development, and logistics.

This course introduces students to the key concepts and approaches of business process innovation (BPI) such as **incremental improvement**, **process automation**, and **process redesign**. BPI initiatives take place across three levels – the enterprise level, the process level, and the application infrastructure level. The focus of this course is on both understanding and designing business processes within these three levels of concern.

This course has both a theoretical and a practical component. Students will learn theoretical process models such as the Business Process Modeling Notation (BPMN) and use them to design process innovations to achieve efficiency, effectiveness, compliance, and agility objectives. They will also discuss the ways in which information technology can be used to manage, transform, and improve business processes. In the meanwhile, students will also gain hands-on experience with the software SAP, current market leader of ERP and BP systems. By going through several business processes using SAP for a global company, the students could reinforce their theoretical learning and link the models to actual business practices.

At the end of this course, the student should be able to:

### **Theory:**

1. Describe and analyze **business work activities**

2. Map business processes using the **business process modeling notation** (BPMN)
3. Identify **process problems**
4. Apply **key business metrics** to analyze and track process performance
5. Explain how IT innovations can enable **agile business processes**
6. Specify **best practice** tactics for improving process efficiency and effectiveness
7. Analyze and critique proposed business process innovations

**Practice:**

1. Be able to navigate the **SAP** system with ease
2. Go through **Procurement, Fulfilment** and **Production** processes using SAP
3. Be able to link the theoretical discussions on business process to the hands-on SAP practice
4. Use the INNOV8 simulation game to understand how business process management could impact the business eco-system

**Prerequisites**

IS 663 or CS 673, for modeling knowledge and a management or business course are suggested. Students with only a technical background should be prepared to invest additional time to understand management and organization concepts.

**Required Texts:**

Paul Harmon, *Business Process Change: A Guide for Business Managers and BPM and Six Sigma Professionals*, 2nd Edition, Morgan Kaufmann, 2007.  
ISBN-13: 9780080553672

**Participation**

Your participation in classroom discussions is expected, if you do not attend class or do not notify me of your absence before class, it will affect your participation grade. Both attendance AND participation, as well as on-line discussion boards will contribute to the participation grade

**Attendance, Absence and Lateness Policy**

You are expected to attend every class if you will not attend a class you should notify me that you will not be attending and the following guidelines apply:

If you are absent three (3) times you will have your grade lowered by ONE Letter grade.

Six (6) times and your grade is lowered by TWO letter Grades.

Nine (9) times you will be given an "F".

Medical Excuses need to be reported to the Dean of Students and they will decide if it

e