

1. Course number and name  
IN3018 Processes Design and Improvement Methodologies
2. Credits and contact hours  
3 - 0 - 8
3. Instructor's or course coordinator's name  
Graciela Caffarel Rodriguez
4. Text book, title, author, and year  
\* Andersen, Bjørn., Business process improvement toolbox / Bjørn Andersen., 2nd ed., Milwaukee, Wis. : ASQ Quality Press, 2007., , , [9780873897198 (alk. paper)], [0873897196 (alk. paper)]
  - a) other supplemental materials
5. Specific course information
  - a. brief description of the content of the course (catalog description)  
It is an advanced level course whose intention is to provide the student with the tools needed so that he can carry out a structured design process through which he will develop competitive processes and services. Know and apply diverse methodological focuses for the analysis and design of planning, information and control systems in an organization. Know the human activity system and know how to use analysis and design methodologies for non-structures situations. Improvement of problematic situations in the organizations from a process focus. Requires previous knowledge in Systems Dynamics. As learning result it is expected that the student designs and process processes, based on the fulfillment of strategic objectives within an organization.
  - b. prerequisites or co-requisites  
IN2005 or FZ2010
  - c. indicate whether a required, elective, or selected elective (as per Table 5-1) course in the program  
Required
6. Specific goals for the course
  - a. specific outcomes of instruction.  
Students will be able to: 1. Design a process from the viewpoint of systems engineering. 2. Identify the improvable aspects of a process. 3. Improve an established process.
  - b. explicitly indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course.  
Students will identify and describe a problem, will identify its difficulty and will develop and evaluate potential solutions.

7. Brief list of topics to be covered
  - Systems engineering methodologies
  - Participatory methodologies for modeling problems
  - Process modeling