Universidad de La Sabana

SUBJECT SYLLABUS

ACADEMIC OVERVIEW
INTERNATIONAL SCHOOL OF ECONOMIC & ADMINISTRATIVE SCIENCES

SUBJECT NAME AND CODE: **Operations Optimization (81135)**
PROGRAM: **International Marketing & Logistics Administration, Business Administration**
Level of Study **Undergraduate Program**

GENERAL ACADEMIC INFORMATION	
LATEST UPDATE	2014-1
VALID FOR	Valid
ACADEMIC AREA	Operations Management
CYCLE	Basic
SEMESTER	Third & Fifth, respectively
SUBJECT TYPE	Mandatory
CREDIT POINTS	4
CLASSROOM HOURS PER WEEK	4
PRE-REQUISITES	Differential Calculus (21101)
LANGUAGE	Spanish
PROFESSOR'S NAME	Carlos Vega

COURSE DETAILS	
COMPETENCES DEVELOPED	1. Specific: - To understand the importance of operations optimization on organizations competitiveness. - To identify and know the different classic models and methodologies to face problems of optimization operations. 2. Basic - Math: - To be able to abstract, analyze and synthesize situations that may occur in organizations' operations. - To be able to apply mathematical models to the organizations dynamic context. - To be able to apply concepts of mathematical modeling, sensitivity analysis, and dynamic programming to decision making in organizations.
COURSE CONTENTS	MODULE I: Introduction to linear programming MODULE II: Networks problems MODULE III: Integer programming MODULE IV: Dynamic programming
METHODOLOGY	Lecture
ASSESSMENT	The evaluation of the subject will be done in three terms during the academic period through a continuous monitoring of the performance of each study in the assessed criteria. The calculation of this grade is performed as follows: Term I (30%): Individual midterm exam Independent work (quizzes, workshops, exercises) Term II (30%): Individual midterm exam Independent work (quizzes, workshops, exercises) Term III (40%): Individual final exam Individual paper Independent work (quizzes, workshops, exercises)

LINKS:	
WEEKLY PLAN	Provided by request
DETAILED CONTENT	Provided by request