Time Slot-_____

Course Code: SBP2MB130

Title: Management Science

Type of Course: Discipline (MBA (Operations & Decision Sciences))

Cohort for which it is compulsory: MBA (I year)

Cohort for which it is elective: NA

No of Credits: 2

Attendance: 80% attendance is mandatory

Semester and Year Offered: I Semester (Slot II) – October 3, 2018 to December 7, 2018

Course Coordinator and Team: Anshu Gupta

Email of course coordinator: anshu@aud.ac.in

Pre-requisites: Candidate must have done one paper of mathematics at 10+2 level

Aim: This is an introductory course on Management Science methods. The objective of the course is to develop a general understanding of the management science/operations research approaches to decision making. The course will facilitate use of Excel Solver for solving management science problems

Brief description of modules/ Main modules:
Unit 1: Introduction to Management Science (2 hour)
Unit 2: Linear Optimization (14 hours)
Unit 3: Network Models (6 hours)
Unit 4: Linear Integer Programming (4 Hours)
Unit 5: Decision Analysis (4 Hours)
Unit 6: Introduction to Waiting Line Models (2 Hours)

Assessment Details with Weights:
1. Group Assignments   30% (throughout trimester)
2. Mid semester   30% (5th Week)
3. End semester   40% (9th Week)

Reading List

1. Anderson, D.R., Sweeney, D.J., and Williams, T.A., Camm, J.D. and Martin, R.K. (2011). An Introduction to Management Science-Quantitative Approaches to Decision Making, 13th edition, South-Western Press.
2. Hillier, F. and Lieberman, G. (2008). Introduction to Operations Research: Concepts and Cases (8th Edition), Tata McGraw Hill Education Private Limited
3. Sharma, J.K. (2006). Operations Research: Theory and Applications (4th Edition), Macmillan India Limited
4. Winston, W.L. and Albright, S.C. (2012). Practical Management Science, 4th Edition, Cengage Learning, South-Western Press

Additional References

1. Wiest, J.D. and Levy, F.K. (2009). A Management Guide to PERT/CPM, With GERT/PDM/DCPM and Other Networks, 2nd Edition, Prentice Hall, ISBN: 978-81-203-0132-0
2. Taha, H.A. (2008). Operations Research: An Introduction (8th Edition), Pearson
3. Winston, W.L. (2004). Operations Research: Applications & Algorithms (4th Edition), Cengage Learning