

**Indian Institute of Technology Guwahati**  
**Proposal for a New Course/ Revision of a Course**

Course Number & Title: BM 701H & Data Analysis in Management Research	
L-T-P-C: 3-0-0-6	
Type of Letter Grading (Regular Letter Grades / PP or NP Letter Grades): Regular Letter Grades	
Kind of Proposal (New Course / Revision of Existing Course): New Course	
Offered as (Compulsory / Elective):	
Offered to: Doctor of Philosophy (PhD)	
Offered in (Odd/ Even / Any): Any	
Offered by (Name of Department/ Center): School of Business	
Pre-Requisite: NIL	
Preamble / Objectives (Optional):	
<p>Course Content/ Syllabus (as a single paragraph if it is not containing more than one subject. Sub-topics/ Sections may be separated by commas(.). Topics may be separated by Semi-Colons(;). Chapters may be separated by Full-Stop(.). While starting with broad heading, it may be indicated with Colon symbol before the topics. For example: Multi-variable Calculus: Limits of functions, Continuity, ..... )</p> <p>Introduction to basic concepts in quantitative research methods, questionnaire design, scaling, sampling ; Basic data analysis, review of basic descriptive statistics, data preparation and presentation, data reading, coding, frequency distributions and Chi-Squared test; Hypothesis testing, Type 1 and 2 errors; Multiple Analysis of Variance, Analysis of Co-variance, Correlation analysis, Principles and assumptions, zero-order, part and partial correlations; Multiple regression analysis, assumptions, Dummy variable regression, panel regression; Advanced regression methodology, Hierarchical and logistic regression for management research; Factor analysis for management research; Discriminant analysis for management research; Cluster analysis; Structural Equation Modeling for Management Research.</p>	
Books (In case UG compulsory courses, please give it as "Text books" and "Reference books". Otherwise give it as "References".	
Texts: (Format: Authors, <i>Book Title in Italics font</i> , Volume/Series, Edition Number, Publisher, Year.)	
1.	Malhotra, N. K., <i>Marketing Research: An applied orientation</i> , Pearson Education Asia, 2001.
2.	Hair, Joseph, Black, W.C., Babin, B.J., & Anderson, R.E., <i>Multivariate Data Analysis</i> , 7th edition, Pearson, 2014.
References: (Format: Authors, <i>Book Title in Italics font</i> , Volume/Series, Edition Number, Publisher, Year.)	