BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, Pilani
Pilani Campus

Instruction Division
First Semester: 2015 – 2016
Course Handout (Part –II)

Date:03/08/2015

In addition to Part – I (General Handout for all courses appended to the Time – Table) this part gives further specific details regarding the course.

Name of Instructor: TRILOK MATHUR
Course No.: MATH F 331
Course Title: INTRODUCTION TO TOPOLOGY

1. Scope and objective: To introduce the students the concepts of logical thinking in abstract terms using formal and axiomatic methods and to lay the foundations for further studies in abstract Mathematics.

2. Text Book: Munkres, J. R.: *Topology*, Pearson Education, 2000 (2nd Edition)

3. Reference Book(s):

1. Armstrong, M.A.: *Basic Topology*, Springer UTM, 1983.
2. Boltyanskii and Efremovich: *Intuitive Combinatorial Topology*, Springer Universitext, 2001.
3. Adams C. and Franzosa R.: *Introduction to Topology Pure and Applied*, Pearson Education, 2009 (1st Edition)
4. Simmons G. F.: *Introduction to Topology and Modern Analysis*, Tata McGraw Hill, 2004.

4. Course Plan:

S.No.	Topic	No. of Lect.	Sec. No.
1.	Metric Spaces	3	20
2.	Topology & Topological Spaces	4	12 to 14
3.	Product Spaces & their applications	3	15, 19 to 21
4	Subspaces & Subspace Topology	2	16
5.	Continuity & Homeomorphism	4	18
6.	Quotient Spaces & their applications	2	22
7.	Connectedness & its Importance	4	23 & 24
8.	Compactness & its Importance	4	26 & 27
9.	Hausdorffness	2	30 & 31
10.	Normal spaces	4	32 to 35
11.	Connected & Compact Curves & Surfaces	4	44 & 64
12.	Classification of Compact Surfaces	4	74, 76 to 78
	Total	40	

5. Evaluation Scheme:

Components	Durations	Marks	Date & Time	Remarks
Continuous Assessment*	40 min.	40	Unannounced	Open book
Mid Semester Test	90 min.	70	6/10 2:00 - 3:30 PM	Closed Book
Comp. Exam	3 hrs.	90	4/12 FN	Partially Open Book

(*) *Classroom performance tests will be conducted either in lecture sessions or in common hours and they will be unannounced & open book. Total 6 such tests of 10 marks each will be conducted and best 4 will be considered for final evaluation.* ***No makeup for classroom performance test will be given in any circumstances*****.**

6. Students are advised to work out problems assigned in the class, some problems will be listed on NALANDA website for their reference. At least one problems from these problems will be asked in Mid-Semester & Comprehensive Exams.

7. Make-Up: All makeup requests should submit before the evaluation component.

8. Chamber Consultation Hour: Tuesday, 5th Hour

9. Notices: All notices concerning this course will be put up only on Department of Mathematics Notice Board.

Instructor – in – Charge
MATH F 331