| Semester  | AUG 2022   |
|---|--|
| Open to semester  | 5,7,11   |
| Course code   | MT3134   |
| Course title  | Point Set Topology   |
| Credits   | 4 /  |
| Course Coordinator & participating faculty (if any)                               | Amit Hogadi  |
| Nature of Course  | Lectures   |
| Pre-requisites  | Single variable calculus, Linear Algebra.  |
| Objectives (goals, type of<br>students for whom useful,<br>outcome etc)           | The goal of the course is to introduce you to the basic<br>language of point set topology which is used in later courses<br>of differential topology, algebraic topology and other areas.<br>The course is useful for those who wish to major in<br>mathematics and perhaps to some mathematically inclined<br>physics students as well. |
| Course contents (details of<br>topics /sections with no. of<br>lectures for each) | Topological spaces and continuous functions (chapter 2 of<br>Munkress) - 8 lectures<br>Connectedness and compactness (chapter 3)- 8 lectures<br>Countability and separation axioms - 8 lectures.<br>Tychonoff's theorem - 8 lectures<br>CW-complexes - 3 lectures<br>Examples and problems - 2 lectures.                                 |
| Evaluation /assessment  | End-Sem Examination-60%<br>Mid-Sem Examination-40%<br>Others-%   |
| Suggested readings (with full<br>list of authors, publisher, year,<br>edn etc.)   | Topology a First Course, by James Munkress.<br>Publisher : Prentice-Hall<br>1974.<br>Any edition will do.  |