



**UNIVERSIDADE FEDERAL DE SANTA CATARINA
CENTRO DE CIÊNCIAS FÍSICAS E MATEMÁTICAS
PÓS-GRADUAÇÃO EM MATEMÁTICA PURA E APLICADA**

MTM410026 Topology

Pre-requisite: Real Analysis

Weekly lesson hours: 06h

Discipline syllabus: Revision of metric spaces. Topological spaces. Continuous functions. Base and sub-base of a topology. Networks. Product space and quotient. Connectivity. Compactness. Urysohn's motto. Theorems of Tietze, Tychonov and Arzela-Ascoli.

BIBLIOGRAPHIC REFERENCES

Text book:

1. Wilson A. Sutherland, Introduction to Metric & Topological Spaces, 2nd edition, Oxford, 2009.
2. John L. Kelley, "General Topology", Van Nostrand Reinhold, 1970.

COMPLEMENTARY BIBLIOGRAPHY

3. Nicolas Bourbaki, "General Topology", Addison-Wesley Publishing Company, 1966.
4. James Dugundji, "Topology", Allyn and Bacon, Inc, 1966.
5. K. Jänich, S. Levy, "Topology", Springer, 1984.
6. Elon L. Lima, "Elementos de Topologia Geral", Textos Universitários, SBM, 2010.
7. Bert Mendelson, "Introduction to Topology", 3rd Edition, Dover Publications, 1990.
8. James R. Munkres, "Topology", 2nd edition, Prentice Hall, 2000.
9. George F. Simmons, "Introduction to Topology and Modern Analysis", McGraw-Hill Inc, 2003.
10. S. Willard, "General Topology", Dover Publications, 2004.