



**UNIVERSIDADE FEDERAL DE MINAS GERAIS**  
**ESCOLA DE ENGENHARIA**  
**Programa de Pós-Graduação em Engenharia**  
**Metalúrgica, Materiais e de Minas**

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## **EMT906 - Tribologia: Desgaste e Fricção**

Tribologia de superfícies. Contato entre superfícies. Dureza convencional e instrumentada. Fricção. Desgaste. Desgaste e projetos. Engenharia de Superfície. Seleção de Materiais. Modificação superficial. Recobrimentos.

Créditos: 04

Horas/aula: 60

### Bibliografia:

1. Tribology: Friction and Wear of Engineering Materials: I.M. Hutchings, Ed: Edward Arnold, 1992
2. Introduction to Tribology: Bharat Bhushan, Ed. John Wiley & Sons, Inc., 2002.
3. Contact Mechanics, K.L. Johnson, Cambridge University Press, 1985.
4. "Introduction to Contact Mechanics (Mechanical Engineering Series)"  
Anthony C. Fischer-Cripps. 2004
5. Nanoindentation (Mechanical Engineering Series), Fischer-Cripps
6. Ensaios dos Materiais, A. Garcia , J.A. SPIM; C. A. SANTOS
7. The Hardness of Metals, D. Tabor, Oxford Classic Texts in the Physical Science
8. Ceramic Hardness: I. J. McColm, Plenum Press, 1990
9. Three Dimensional Surface Topography: K J Stout, L Blunt, Penton Press, 1994
10. Microstructure and Wear of Materials, Karl-Heinz Zum Gahr, Elsevier, 1987.
11. Coatings Tribology: Properties , Techniques and Applications in Surfaces Engineering; K. Holmberg and A. Matthews, 1994
12. Steels: Heat Treatment Processing Principles; G. Krauss; ASM International, 1993.

13. Friction, Lubrication and Wear Technology, ASM Handbook, Vol. 18

14. Advanced Surface Coatings a Handbook of Surface Engineering , D.S. Rickersby and A. Matthews; Blackie , 1991.