



**THE OHIO STATE UNIVERSITY**  
COLLEGE OF ENGINEERING

# Principles and Applications of Tribology

## MECHENG 7765

**Credit Hours:**

3.00 - 3.00

---

**Course Levels:**

Graduate (5000-8000 level)

---

**Course Components:**

Lecture

---

**Course Description:**

Mechanisms of friction, wear, and lubrication ranging from macro- to nanoscale that govern interfacial behavior; applications to friction and wear problems.

---

**Course Goals / Objectives:**

- Understand fundamentals of tribology and nanotribology
  - Understand how to use tribological principles to diagnose failure modes and design reliable products
- 

**Course Topics:**

- Solid surface characterization
  - Adhesion
  - Friction
  - Wear
  - Lubrication
  - Tribological components
- 

**Designation:**

Elective