

CHAPTER OVERVIEW

5: Torque and Angular Momentum

How can we guarantee that a body is in equilibrium and what can we learn from systems that are in equilibrium? There are actually two conditions that must be satisfied to achieve equilibrium. These conditions are the topics of the first two sections of this chapter.

- [5.1: Prelude to Statics and Torque](#)
- [5.2: The First Condition for Equilibrium](#)
- [5.3: The Second Condition for Equilibrium](#)
- [5.4: Simple Machines](#)
- [5.5: Forces and Torques in Muscles and Joints](#)
- [5.6: Prelude to Rotational Motion and Angular Momentum](#)
- [5.7: Angular Momentum and Its Conservation](#)

Thumbnails: Relationship between force (F), torque (τ), momentum (p), and angular momentum (L) vectors in a rotating system. (r) is the radius. (Public domain; Yawe).

Contributors and Attributions

- Paul Peter Urone (Professor Emeritus at California State University, Sacramento) and Roger Hinrichs (State University of New York, College at Oswego) with Contributing Authors: Kim Dirks (University of Auckland) and Manjula Sharma (University of Sydney). This work is licensed by OpenStax University Physics under a [Creative Commons Attribution License \(by 4.0\)](#).

This page titled [5: Torque and Angular Momentum](#) is shared under a [CC BY](#) license and was authored, remixed, and/or curated by [OpenStax](#).