

# Legged Locomotion of Robots and Animals

(aka Mechanics of Terrestrial Locomotion, TAM 7960,  
really a 5000 level course)

**Summary:** Mechanical models and empirical studies that shed light on the coordination, speed, energetics, and stability of locomotion in legged animals (especially people) and robots.

**For whom?** Advance undergrads, M-Eng, PhD students interested in robotics, biomechanics or motor control.

**When and where?**

Tues and Thurs

1:25 - 2:40, Bard 140

**Grading?** Weekly homework and readings, 1 prelim and a final exam, 3 credits

**Pre-reqs?** Passing knowledge of, or willingness to learn quickly, elements of dynamics (2D rigid-body), ODEs, linear algebra, Matlab.

**More info?** 1) google 'Cornell robotics', first hit, click on courses  
2) google 'ruina', first hit, click on this course