

CSCI-4290/6290: Robot Motion Planning
Lecture 1: August 30, 2005
Introduction to Motion Planning

Today's Class

1. Overview of course and syllabus
2. Motion Planning: The basic problem
3. Extensions to the basic motion planning problem
4. Applications of motion planning

Reading

Robot algorithms, D. Halperin, L. Kavraki, and J.-C. Latombe, In M. J. Atallah, editor, *Algorithms and Theory of Computation Handbook*, pages 21-1–21-21. CRC Press, Boca Raton, Florida, 1999.

Chapter 1 (and 3), Choset et al.

Chapter 1 (and 3), LaValle.

Next Class

Geometric transformations and configuration space representations.

There will be a short in-class math quiz on Friday, September 2. This class participation exercise will count for 1% of your grade. It is intended to assess your knowledge of multivariable calculus and matrix algebra that we will use during the course.