

CSCI-4290/6290: Robot Motion Planning  
Lecture 1: August 26, 2003  
**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.

### **Next Class**

Geometric transformations and configuration space representations.

There will be a short in-class math quiz on Friday, August 29. 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.