

FFR125, FIM760  
**Autonomous agents**

LP III-IV, 2008

**Reading guidance 2008-02-26:**

**Literature:**

1. **Wahde, M.:** *An introduction to autonomous robots* (lecture notes). [MW]
  2. **Xie, M. --** *Fundamentals of robotics - linking perception to action*. [MX]
  3. Various scientific papers (web links or printouts will be made available during the course).
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Lecture 11: Control system of robots I:

**(1) MX** 199-220:

- 5.1 Introduction; *briefly*
- 5.2 Automatic-feedback control
  - 5.2.1 System concept; *important*
  - 5.2.2 Closed-loop control scheme; *important*
  - 5.2.3 System dynamics; *important*
  - 5.2.4 Transfer functions; *briefly*
  - 5.2.5 System performance; *briefly*
  - 5.2.6 Analysis of absolute stability; *briefly*
  - 5.2.7 Tuning of PID control algorithms; *important*

**(2) Bräunl, T.:** Embedded robotics, p. 93-107; *important*

Printouts distributed in the lecture (available upon request)

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