

Supplementary Material

-introduced at the first Lecture, also available in Course Homepage

- Karl J. Åström and Richard M. Murray: Feedback Systems: An Introduction for Scientist and Engineers. Princeton University Press. Available as e-book via Chalmers Library.
This book gives an introduction to dynamical systems and feedback. It also contains a chapter on modelling. The site <http://www.cds.caltech.edu/~murray/amwiki/Main> [Page Links to an external site.](#) contains pdf versions of the book, examples, slides and more.
- Lennart Ljung and Torkel Glad: Modeling and Identification of Dynamic Systems. Studentlitteratur 2016.
This book covers both physical modelling and system identification and can be a complement to those parts of the lecture notes.
- Rolf Johansson: System Modeling and Identification. Prentice Hall 1993.
Similar in scope as the previous reference.
- Michael M. Tiller: Modelica by Example. Web-based book at <https://mbe.modelica.university> [Links to an external site.](#)
- P. Fritzson: Modeling and Simulation of Technical and Physical Systems with Modelica. Wiley IEEE Press 2011.
- A. Boström: [Rigid body dynamics](#) [Download Rigid body dynamics](#), Compendium.
Contains among other things an introduction to Lagrange mechanics.
- David F. Griffiths and Desmond J. Higham: Numerical Methods for Ordinary Differential Equations. Springer 2010. Available as e-book via Chalmers Library.
Contains a more comprehensive treatment of the material covered in the simulation part of the course.