

PENSUM OG TILLATTE HJELPEMIDLER TIL EKSAMEN HØST 2009
Curriculum and allowed aids that may be taken to the examination 2009

TMR 4295 KONSTRUKSJON AV MEKANISKE SYSTEMER
Design of mechanical systems

TILLATTE HJELPEMIDLER TIL EKSAMEN / Allowed aids for the examination:-

- Godkjent kalkulator (enkel) / Approved calculator (simple)
- J. E. Shigley, Mechanical Engineering Design, 8th Ed, Mc Graw Hill, 2008
- A dictionary from English to your mother tongue is allowed to be taken into the exam.
No other printed or hand written notes are allowed.

PENSUM / CURRICULUM

A. Design of Mechanical Systems

J. E. Shigley, Mechanical Engineering Design, 8th Ed, Mc Graw Hill, 2008

- *Ch 6 Fatigue Failure Resulting from Variable Loading, Sections 6-1 to 6-14 (not 6-6)*
- *Ch 7 Shafts and Shaft Components, Section 7-8 Limits and Fits*
- *Ch 8 Screws, Fasteners, and the Design of Non-permanent Joints, Sections 8-4 to 8-10*
- *Ch 11 Rolling - Contact Bearings, Sections 11-1 to 11-8 and 11-10*
- *Ch 13 Gears – General, Sections 13-1 to 13-7, 13-13 and 13-14*

Samt / together with

- Forelesningsnotater / *Lecture notes (Excluding Lecture 8 Pressure vessels)*
- Øvingsoppgaver / *Exercises with solutions are included in the curriculum.*

B. The Finite Element Method

1. Curriculum related to the note “APPENDIX III: THE FINITE ELEMENT METHOD: A brief introduction with focus on shell elements”:

All of the note is relevant.

2. Curriculum related to the distributed lecture notes “The Finite Element Method – with focus on analysis of pipe systems”
by Å. Ø. Waløen are as follows:

All sections except the following: 14 and 15.

3. Curriculum related to the distributed lecture notes “Heat Transfer computed by means of the Finite Element method” are as follows:

All sections except: 2.2, 2.6, 2.9. In addition all of Chapter 3 is excluded.

In addition the exercises with solutions are included in the curriculum.

