

Welcome to HL1007 Medical Engineering, basic course!



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Course administration



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Literature



*** For Swedish speaking students:**

"Jacobsons medicin och teknik" av Maria Lindén och P. Åke Öberg (ISBN 91-44-04760-6). Den förra upplagan hette "Medicin och teknik" av Bertil Jacobson (ISBN 91-630-3338-0) och den kan också användas. Äldre upplagor än så är dock alltför föråldrade.

*** For English speaking students:**

"Medical Devices: Use and Safety" by Bertil Jacobson och Alan Murray (ISBN 0-443-10259-7) combined with material from an older book. The extra material will be sold at the lectures.

*** For all students:**

Handouts and some other material will be downloadable from the Internet. I will get back to you on where and how. All downloadable course material published is also part of the course literature.

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About the course



- The course is based on the literature.
- The course contains 13 lectures, but no laboratory exercises.
- The presence is voluntary, i.e. you can show up at the first lecture and register for the course and then study on your own until the written exam.
- The point of the lectures is that you will have the opportunity to listen to and discuss with people who work or do research within the field of medicine and/or medical engineering.

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Examination



- There will be one written exam, with a grade scale A-F, divided into three parts: Terminology, Medicine and Technology
- The maximum score is 85 points, to pass (grade E) you need 45 points.
- For the other grades the requirements are:
 - D: 45 points in total and at least 10 points on each part
 - C: 56 points in total and at least 10 points on each part
 - B: 66 points in total and at least 15 points on terminology, 20 points on medicine and 20 points on technology
 - A: 76 points in total and at least 20 points on terminology, 25 points on medicine and 25 points on technology

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Control exam



- To make sure that you will start studying the course right away there will be a short (45 minutes) control exam on September 15th
- The control exam will only have questions on chapter 1 and 2 in the copies, i.e. Terminology and Medicine (chapters 1 and 2 in the Swedish book).
- The control exam can give bonus points on those two parts of the exam. The maximum score will be 18 points; 9 on Terminology and 9 on Medicine.
The extra points on each part of the exam will be given as:
 - 0 – 3 p: No extra points
 - 4 – 6 p: One extra point
 - 7 – 9 p: Two extra points

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Dates and times



- The schedule can be found at the KTH server.
- Hopefully there will be no changes, but since many of the lecturers are practising physicians they may occasionally have to change times
- If so, you will be told by e-mail and, if possible, on the lecture before.
- Examination: Saturday November 1st
- Re-examination: Wednesday January 7th

[Schedule](#)

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Further courses (examples)



- HL2013 Radiation Therapy
- HL2018 Advanced Physiology
- HL2031 Subcellular Imaging
- HL2005 Implants and Biomaterials
- HL2008 Simulation Methods in Medical Engineering
- HL2019 Ionising Radiation Imaging
- HL2010 Ultrasound
- HL2011 Magnetic Resonance Imaging
- HL2027 3D Image Reconstruction and Analysis in Medicine
- There are also a number of courses in Swedish. Contact Mats Nilsson if you want a list of those.

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