732A63: Probability theory

— About the course —

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Course organization

Lectures & Seminar sessions

- 6 Lectures: theory with examples. (Jolanta)
  Notice that Lecture 1 is given in 2 slots.
- 6 Seminars: problem solving sessions + open discussions. (Jolanta)

Exam

- Examination on 28th Oct 2020
- Re-examination on 7th Dec 2020

Book & materials

- Gut, A. An intermediate course in probability. 2nd ed.
  Springer-Verlag, New York, 2009. ISBN 978-1-4419-0161-3;
  See http://www2.math.uu.se/~allan/81misprints.pdf for misprints
  and corrections.

- see LISAM for materials and messages;

- see slides from 2016 on course webpage
  https://www.ida.liu.se/~732A63/

- Chapter 1: Multivariate random variables
- Chapter 2: Conditioning
- Chapter 3: Transforms
- Chapter 4: Order statistics
- Chapter 5: The multivariate normal distribution
- Chapter 6: Convergence

Examination

- The examination consists of a written exam with max score 20 points and grade limits:
  A: 19p, **B**: 17p, **C**: 14p, **D**: 12p, **E**: 10p.

- You are **allowed to bring** a pocket calculator to the exam, but no books or notes.

- Grade limits given above and allowed materials can be changed if exam is given as a home-/distance-written exam.

- The following will be **distributed with the exam**:
  - Table with common formulas and moment generating functions (available on the course homepage).
  - Table of integrals (available on the course homepage).
  - Table with distributions from Appendix B in the course book.

- Active participation in the seminars gives **2 bonus points** to the exam.

Bonus points

- To earn the bonus points a student must be present and active in at least 5 of the 6 seminars, so maximally one seminar can be missed regardless of reasons.

- Active participation means that the student has made an attempt to solve every exercise indicated in the list before respective seminar and is able to present his/her solutions on the board during the seminar. Active participation also means that the student gives help and comments to the classmates' presented solutions.

- In the seminars, for each exercise a student will be selected, using dice based method, to present her/his solution.

- Exercises marked with * are a bit harder and it is ok if you are not able to solve these.

- Exercises marked with self-study relate directly to the lecture.