## Pensum stk4540 Autumn 2013

## General

Students must master probabilistic calculus and rules such as Bayesian and other conditional arguments, sums of random variables rules, moment generation functions and other central issues of probability theory. All exercises discussed during the course is part of the pensum.

A large part of risk in property insurance has to do with sums with random number of terms. Students should understand the main probabilistic sides of such systems, including formulae for their mean and variance and how diversi cation issues are related to them.

Students are expected to be able to sketch computer programs on a platform of their choice. Specifics

The pensum is connected to written material handed out during the course as follows:

Name	Sections	Source
Modelling claim frequency	1-4, 6	Handouts distributed in
3 3 3 3 4 3 3	, -	lectures.
Modelling claim size	1-5,7	Handouts distributed in
		lectures.
Solvency and pricing	1-7	Handouts distributed in
		lectures
Evaluating risk: a primer	1-3	Handouts distributed in
		lectures
Introduction to Reserving	1-8	Distributed on the web
Lecture notes	All	Distributed on the web