



MATEMATISK INSTITUTT  
UNIVERSITETET I BERGEN

The final curriculum for  
Autumn 2017 is the same  
as this preliminary curriculum

Bergen

November 18 2017

Tyggve Nilsen

PRELIMINARY CURRICULUM  
STAT220 - STOCHASTIC PROCESSES  
AUTUMN ~~2016~~ 2017

Textbook:

M. Pinsky & S. Karlin: An Introduction to Stochastic Modeling, fourth edition, Academic Press, San Diego 2011.

CHAPTER 1: INTRODUCTION

Section 1.1 - 1.6

CHAPTER 2: CONDITIONAL PROBABILITY AND CONDITIONAL EXPECTATION

Section 2.1 - 2.4

CHAPTER 3: MARKOV CHAINS: INTRODUCTION

Section 3.1 - 3.6.

CHAPTER 4: THE LONG RUN BEHAVIOR OF MARKOV CHAINS

Section 4.1 - 4.5

CHAPTER 5: POISSON PROCESSES

Section 5.1, except 5.1.4

Section 5.2, only the postulates, page 234 - 235 and the definitions at page 236.

Section 5.3.

Section 5.4, to 5.4.1 on page 253

Section 5.5.

CHAPTER 6: CONTINUOUS TIME MARKOV CHAINS

Section 6.1 - 6.6

CHAPTER 9: QUEUEING SYSTEMS

Section 9.1 - 9.2

May 30, 2016

Hans Karlsen

June 27 2017  
Tyggve Nilsen

HJK