UNIVERSITY OF NEBRASKA AT OMAHA

MATH 8650

Introduction To Probability Models

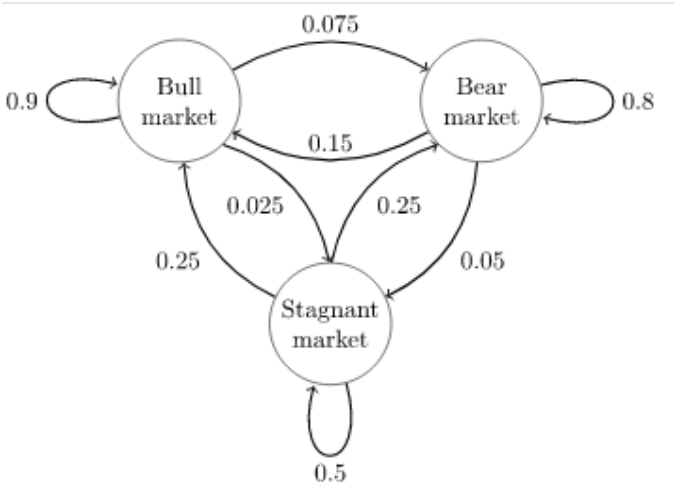
TR 5:30 PM – 6:45 PM | Dr. Steven From

This course is concerned with probability models which include Markov chains, Poisson processes, renewal processes and functions, birth and death processes, and queueing theory. These models have applications in biology, physics, computer science, engineering, economics, business, and many other areas. A very important part of the course is the idea of conditioning and developing abilities to work with conditional probabilities. Various applications will be discussed in the course, including the estimation of animal population sizes and some applications to the sciences.

Textbook: Introduction To Probability Models,12th ed., Sheldon M. Ross, Academic Press, 2019.

Grading: There will be two exams, a mid-term and a final. Both exams are take-home exams and approximately one week is given to do each exam. There will also be six homework assignments.
The course grade is based on 60% exams and 40% homework. Optional extra credit projects will be given.

Prerequisites: MATH 4740/8746 Probability & Statistics I or STAT 3800/8805 Applied Engineering Probability & Statistics, or permission of instructor.



A Finance Markov Chain

For More Information:

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