Instructor: Dr. Cary Tsai

Prerequisite:

ACMA 335.

Required Text:

Lecture Notes and selected papers.

References:

- Actuarial Theory for Dependent Risks: Measures, Orders and Models, 2005, M. Denuit, J. Dhaene, M.J. Goovaerts and R. Kaas; publisher: John Wiley & Sons
- Stochastic Orders, 2007, M. Shaked and G. Shanthikumar; publisher: Springer Science+Business Media, LLC
- Insurance Premiums, 1984, M.J. Goovaerts, F. De Vylder, and J. Haezendonck; publisher: North-Holland

Calendar Description:

Actuarial risks. Insurance premium calculation principles and properties. Risk measures and ordering. Applications.

Outline:

This course studies the actuarial and financial risks. A variety of risk measures and orders, and premium calculation principles and associated properties will be introduced. They include the following:

~ Stochastic order
~ Stop-loss order
~ Hazard rate order
~ Likelihood ratio order
~ Other orders
~ Higher degree order
~ Premium calculation principles
~ Properties of premium calculation principles   return of course papers and the