

## Tamkang University Academic Year 110, 2nd Semester Course Syllabus

Course Title	RISK THEORY	Instructor	LAI, YAO-SHYAN
Course Class	TLOXM1A MASTER'S PROGRAM, DEPARTMENT OF RISK MANAGEMENT AND INSURANCE, 1A	Details	<ul style="list-style-type: none"> <li>◆ General Course</li> <li>◆ Selective</li> <li>◆ One Semester</li> </ul>
Relevance to SDGs	SDG12 Responsible consumption and production		
<b>Departmental Aim of Education</b>			
<ul style="list-style-type: none"> <li>I. Emphasize on a monographic study on insurance, and enhance professional knowledge of insurance.</li> <li>II. Enhance training for analytical thinking, and strengthen problem-solving and analytical skills.</li> <li>III. Focus on industry-university cooperation, and combine theory and practical issues.</li> </ul>			
<b>Subject Departmental core competences</b>			
<ul style="list-style-type: none"> <li>A. Students will exhibit professional knowledge of risk management and insurance. (ratio:50.00)</li> <li>B. Students will exhibit the ability of operations management in risk management and insurance.(ratio:50.00)</li> </ul>			
<b>Subject Schoolwide essential virtues</b>			
<ul style="list-style-type: none"> <li>2. Information literacy. (ratio:50.00)</li> <li>5. Independent thinking. (ratio:50.00)</li> </ul>			
Course Introduction	<p>This class provides with a statistical tool to analyze how the risks assumed by the insurance companies.to affect their operation, including pricing, financial situation, etc.</p>		

**The correspondences between the course's instructional objectives and the cognitive, affective, and psychomotor objectives.**

Differentiate the various objective methods among the cognitive, affective and psychomotor domains of the course's instructional objectives.

I. Cognitive : Emphasis upon the study of various kinds of knowledge in the cognition of the course's veracity, conception, procedures, outcomes, etc.

II. Affective : Emphasis upon the study of various kinds of knowledge in the course's appeal, morals, attitude, conviction, values, etc.

III. Psychomotor: Emphasis upon the study of the course's physical activity and technical manipulation.

No.	Teaching Objectives	objective methods
1	to upgrade the students the ability of actuarial mathematics	Cognitive

The correspondences of teaching objectives : core competences, essential virtues, teaching methods, and assessment

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	AB	25	Lecture, Practicum	Testing, Study Assignments

**Course Schedule**

Week	Date	Course Contents	Note
1	111/02/21 ~ 111/02/25	introduction to risk theory	
2	111/02/28 ~ 111/03/04	the skill of collecting loss data and collate it (1)	
3	111/03/07 ~ 111/03/11	the skill of collecting loss data and collate it (2)	
4	111/03/14 ~ 111/03/18	setting loss distributions (1)	
5	111/03/21 ~ 111/03/25	setting loss distributions (2)	
6	111/03/28 ~ 111/04/01	individual risk model (1)	
7	111/04/04 ~ 111/04/08	individual risk model (2)	
8	111/04/11 ~ 111/04/15	collective risk model (1)	
9	111/04/18 ~ 111/04/22	collective risk model (2)	
10	111/04/25 ~ 111/04/29	rate-making for individual risk (1)	
11	111/05/02 ~ 111/05/06	rate-making for individual risk (2)	
12	111/05/09 ~ 111/05/13	credibility theory (1)	
13	111/05/16 ~ 111/05/20	credibility theory (1)	

14	111/05/23~ 111/05/27	mathematics of reinsurance (1)	
15	111/05/30~ 111/06/03	mathematics of reinsurance (2)	
16	111/06/06~ 111/06/10	ruin theory (1)	
17	111/06/13~ 111/06/17	ruin theory (2)	
18	111/06/20~ 111/06/24	review and discussion	
Requirement			
Teaching Facility	(None)		
Textbooks and Teaching Materials	Insurance Risk and Ruin,2005,by David C.M.Dickson,		
References	Loss Models,1998,by Klugman		
Number of Assignment(s)	(Filled in by assignment instructor only)		
Grading Policy	◆ Attendance : 10.0 %    ◆ Mark of Usual : 10.0 %    ◆ Midterm Exam : 40.0 % ◆ Final Exam : 40.0 % ◆ Other < > :        %		
Note	This syllabus may be uploaded at the website of Course Syllabus Management System at <a href="http://info.ais.tku.edu.tw/csp">http://info.ais.tku.edu.tw/csp</a> or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at <a href="http://www.acad.tku.edu.tw/CS/main.php">http://www.acad.tku.edu.tw/CS/main.php</a> . <b>※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</b>		