



UNIVERSITAS GADJAH MADA

Faculty of Mathematics and Natural Sciences

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Undergraduate Program in Statistics

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MODULE HANDBOOK

Module name	Pengantar Teori Risiko Aktuaria 2 (Introduction to Actuarial Risk Theory 2)
Module level, if applicable	Bachelor
Code, if applicable	MMS-3434
Subtitle, if applicable	-
Courses, if applicable	-
Semester(s) in which the module is taught	6 th Semester
Person responsible for the module	
Lecture(s)	Danang Teguh Qoyyimi, M.Sc., Ph.D.
Language	Bahasa Indonesia
Classification within the Curriculum	Compulsory course / Elective Studies
Teaching format /class hours per week during the semester:	3 hours lecture
Workload	3 hours lectures, 6 hours individual study, 14 weeks per semester, and total 126 hours a semester
Credit points	3
Requirements	MMS-3432
Module objectives/intended learning outcomes	By the end of this course, students should be able to: CO1 Apply the estimation method in actuarial cases CO2 Apply bayesian method in estimation CO3 Calculate premium using credibility theory
Content	<ol style="list-style-type: none"> 1. Review on mathematical statistics 2. Estimation for complete data 3. Estimation for modified data 4. Frequentis estimation 5. Bayesian estimation 6. Model selection 7. Credibility theory <p>This course will train the student in both knowledge and application setting but give more portion to the knowledge.</p>
Study and xamination requirements and forms of examination	<p>The weight of assignments will be as follows:</p> <ol style="list-style-type: none"> i. Quiz, homework 10% ii. Group discussion 15% iii. Mid semester exam 35% iv. Final exam 40% <p>Grade scale:</p> <p>A 85 ≤ score A/B 75 ≤ score < 85 B 60 ≤ score < 75 B/C 50 ≤ score < 60 C 40 ≤ score < 50 D 20 ≤ score < 40 E score < 20</p>

Media employed	Slides and LCD projectors, blackboards
Reading List	<ol style="list-style-type: none"> 1. Klugman, S. A., Panjer, H. H., dan Willmot G. E. (2012), <i>Loss Model: From Data to Decision</i> 4th edition, Wiley 2. Kaas, R., Goovaerts, M., Dhaene, J., Denuit, M. (2008), <i>Modern Actuarial Risk Theory: Using R</i>, Springer.

CO and PLO mapping

	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7
CO 1	x						
CO 2		x					
CO 3				x			