



UNIVERSITAS GADJAH MADA
 Faculty of Mathematics and Natural Sciences
 Mathematics Department

Sekip Utara Bulaksumur Yogyakarta 55281 Telp: +62 274 552243 Fax: +62 274 555131 Email: stat.fmipa@ugm.ac.id Website: <http://s1stat.fmipa.ugm.ac.id/>

Undergraduate Program in Statistics

Telp : +62 274 552243

Email : stat.fmipa@ugm.ac.id; kaprodi-s1-statistika.mipa@ugm.ac.id

sekprodi-s1-statistika.mipa@ugm.ac.id

Website : <http://s1stat.fmipa.ugm.ac.id/>

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> <table style="margin-left: 20px;"> <tr> <td>i. Quiz, homework, group discussion</td> <td style="text-align: right;">25%</td> </tr> <tr> <td>ii. Mid semester exam</td> <td style="text-align: right;">35%</td> </tr> <tr> <td>iii. Final exam</td> <td style="text-align: right;">40%</td> </tr> </table>	i. Quiz, homework, group discussion	25%	ii. Mid semester exam	35%	iii. Final exam	40%
i. Quiz, homework, group discussion	25%						
ii. Mid semester exam	35%						
iii. Final exam	40%						

	Grade scale: A: $85 < \text{score} \leq 100$ A-: $80 < \text{score} \leq 85$ A/B: $75 < \text{score} \leq 80$ B+: $70 < \text{score} \leq 75$ B: $65 < \text{score} \leq 70$ B-: $60 < \text{score} \leq 65$ B/C: $55 < \text{score} \leq 60$ C+: $50 < \text{score} \leq 55$ C: $45 < \text{score} \leq 50$ C-: $40 < \text{score} \leq 45$ C/D: $35 < \text{score} \leq 40$ D+: $30 < \text{score} \leq 35$ D: $20 < \text{score} \leq 30$ E: $0 \leq \text{score} \leq 20$
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			