



UNIVERSITAS GADJAH MADA
Faculty of Mathematics and Natural Sciences
Mathematics Department

Skip 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 Matematika Aktuaria I (Introduction to Actuarial Mathematics I)
Module level, if applicable	Bachelor
Code, if applicable	MMS-3438
Subtitle, if applicable	
Courses, if applicable	
Semester(s) in which the module is taught	I
Person responsible for the module	Adhitya Ronnie Effendie
Lecture(s)	Adhitya Ronnie Effendie
Language	Indonesian
Classification within the Curriculum	elective
Teaching format / classhours per week during the semester:	lecture, lesson, practical, project
Workload	
Credit points	3
Requirements	MMS-2110 Multivariable Calculus, MMS-2410 Introduction to Probability Model
Module objectives/intended learning outcomes	Students understand concept of annuities Students understand concept of life insurance Students understand concept of insurance contracts Students understand concept of benefit premium
Content	This course is about modelling Life Insurance based on stochastic approach. During the course session, the students may learn the operation of Life Insurance companies. Several technical and actuarial procedures are given to understand the calculation and determination of such actuarial quantities like premium and benefit reserves.

Study and xamination requirements and forms of examination	<p>The weight of assignments will be as follows:</p> <ul style="list-style-type: none"> i. Quiz, homework 25% ii. Mid semester exam 35% iii. Final exam 40% <p>Grade scale:</p> <p>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: $0 \leq \text{score} \leq 20$</p>
Media employed	
Reading List	Bowers, et. al. <i>Actuarial Mathematics</i> , second edition (1997) Society of Actuaries.