UNIVERSITAS GADJAH MADA
Faculty of Mathematics and Natural Sciences
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MODULE HANDBOOK

Module name:	*Capita Selecta in Advanced Computation of Statistics*
Code, if applicable:	MMM 7508
Subtitle, if applicable	
Semester(s) in which the module is taught:	1st or 2nd semester
Person responsible for the module:	Chair of Computation of Statistics Research Group
Language:	Bahasa Indonesia
Relation to curriculum:	Elective Course
Teaching methods	Lecture, classroom discussion, project-based learning.
Workload (incl. contact hours, self-study hours)	Total workload is 232 hours per semester, which consists of 50 minutes lectures per week, 120 minutes of structured activities per week, 120 minutes of individual study per week, in total is 16 weeks per semester, including mid exam and final exam.
Credit points in Credit Units	3
Required and recommended prerequisites for joining the module	Students have learned some basic course in statistics and statistical mathematics course. Students also have some knowledge on statistical software, such as *R.*
Module objectives/intended learning outcomes:	After completing this course, the students have ability to: CO 1. analyze the theoretical aspect of Advanced Statistical Computing, related to the doctoral research being studied CO 2. use software for doing Advanced Statistical Computing related to the doctoral research being studied CO3. analyze some extended Advanced Statistical Computing models and methods related to the doctoral research being studied.
Content:	It will be derived from the research topic of the students. It will be focused on the theory, models, and method of specific data analysis used in the student research.
Examination forms	Oral presentation, essay, paper
Study and examination requirements and forms of examination:	The final mark will be weighted as follows: No — Assessment methods (components, activities) — Weight (percentage) 1 — Final Examination (portfolio/essay/oral presentation) — 35% 2 — Mid-Term Examination (portfolio/essay/presentation) — 35% 3 — Class Activities: Presentation — 30%

	To pass the course, the minimum grade is B.
Media employed:	Board, LCD Projector, Laptop/Computer
Reading List:	1. Härdle, W.K., Lu, H. H and Shen, X. , 2018, Handbook of Big Data Analytics, Springer 2. Recent publication on statistical computing of the specific topic of research

Mapping of The COs and PLOs

	PLO – 1 S3 Mat	PLO – 2 S3 Mat	PLO – 3 S3 Mat	PLO – 4 S3 Mat	PLO – 5 S3 Mat	PLO –6 S3 Mat
CO 1	v	v	v		v	
CO 2	v	v	v		v	
CO 3	v	v	v		v	v

Last Modified Date : February 10, 2024

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MODULE HANDBOOK

Module name:	*Capita Selecta in Advanced Computation of Statistics*
Code, if applicable:	MMM 7508
Subtitle, if applicable	Some topics on Advanced Statistical Computing
Semester(s) in which the module is taught:	1st or 2nd semester
Person responsible for the module:	Chair of Computation of Statistics Research Group
Language:	Bahasa Indonesia
Relation to curriculum:	Elective Course
Teaching methods	Lecture, classroom discussion, project-based learning.
Workload (incl. contact hours, self-study hours)	Total workload is 232 hours per semester, which consists of 50 minutes lectures per week, 120 minutes of structured activities per week, 120 minutes of individual study per week, in total is 16 weeks per semester, including mid exam and final exam.
Credit points in Credit Units	3
Required and recommended prerequisites for joining the module	Students have learned some basic course in statistics and statistical mathematics course. Students also have some knowledge on statistical software, such as *R.*
Module objectives/intended learning outcomes:	After completing this course, the students have ability to: CO 1. analyze the theoretical aspect of Advanced Statistical Computing, related to the doctoral research being studied CO 2. Use software for doing Advanced Statistical Computing related to the doctoral research being studied CO3. analyze some extended Advanced Statistical Computing models and methods related to the doctoral research being studied.
Content:	It will be derived from the research topic of the students. It will be focused on the theory, models, and method of specific data analysis used in the student research.
Examination forms	Oral presentation, essay, paper
Study and examination requirements and forms of examination:	The final mark will be weighted as follows: No — Assessment methods (components, activities) — Weight (percentage) 1 — Final Examination (portfolio/essay/oral presentation) — 35% 2 — Mid-Term Examination (portfolio/essay/presentation) — 35% 3 — Class Activities: Presentation — 30% To pass the course, the minimum grade is B.

Media employed:	Board, LCD Projector, Laptop/Computer
Reading List:	1. Härdle, W.K., Lu, H. H and Shen, X. , 2018, Handbook of Big Data Analytics, Springer 2. Recent publication on statistical computing of the specific topic of research

Mapping of The COs and PLOs

	PLO – 1 S3 Mat	PLO – 2 S3 Mat	PLO – 3 S3 Mat	PLO – 4 S3 Mat	PLO – 5 S3 Mat	PLO –6 S3 Mat
CO 1	v	v	v		v	
CO 2	v	v	v		v	
CO 3	v	v	v		v	v

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