	INSTITUT TEKNOLOGI SEPULUH NOPEMBER FACULTY OF SCIENCE AND DATA ANALYTICS DEPARTMENT OF STATISTICS STATISTICS UNDERGRADUATE PROGRAM

Course	Course Name	:	**Research Methodology**
	Course Code	:	SS234742
	Credit	:	2 SKS
	Semester	:	VII

COURSE DESCRIPTION

Research Methodolgy is a course that supports the graduate learning outcomes (PLO) of study programs, namely: PLO-2, PLO-7, PLO-9, and PLO-10. After attending this course, students are expected to be able to understand concepts and methodologies in scientific research, especially the stages in research in the field of applied statistics, and can apply them to a real problem in society. Through this course, it is hoped that students will have a learning experience to think critically and be able to make the right decisions about the stages in carrying out scientific research that is appropriate for a problem and its solution. The learning strategy used is discussion and practice as well as the task of making a research proposal.

PROGRAM LEARNING OUTCOME

PLO-2   Able to study and utilize science and technology in order to apply it to certain areas of expertise, and be able to make appropriate decisions from the results of their own work or group work in the form of final project reports or other forms of learning activities whose output is equivalent to the Final Project through logical, critical thinking , systematic and innovative.

PLO-7   Able to use modern computing devices to solve statistical problems

PLO-9   Able to apply statistical methods to analyze theoretical and real problems

PLO-10   Able to apply business, industrial, economic, social, health or environmental statistical methods to real problems

COURSE LEARNING OUTCOME

CLO.1   Able to compile research proposals equivalent to Final Projects

CLO.2   Can identify research descriptions and statistical methods to analyze problems in the fields of business and industry, social and population, environment and health, economics and finance, and computing.

CLO.3   Able to express research ideas in a scientific writing, both written and oral.

MAIN SUBJECT

1. Concept (definition), benefits, and classification of research
2. The stages of research
3. Create a research design
4. Data processing and analysis: data quality control, data management, appropriate statistical analysis methods
5. Report preparation: report format, presentation techniques and illustration creation,

standard Indonesian grammar
6. Statistical research
7. Preparation of proposals

PREREQUISITE

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REFERENCES

1. FMIPA-ITS. 1996. Pedoman Kerja Praktek dan Tugas Akhir.
2. Kemenristek Dikti. 2016. Panduan PKM. Jakarta.
3. Sekaran, U., 2006. Metodologi Penelitian untuk Bisnis. Buku 1. Edisi 4. Diterjemahkan oleh Universitas Indonesia. Jakarta: Salemba Empat.
4. Sekaran, U., 2006. Metodologi Penelitian untuk Bisnis. Buku 2. Edisi 4. Diterjemahkan oleh Universitas Indonesia. Jakarta: Salemba Empat.
5. Vanderstoep SW and Johnston D.D. 2009. Research Methods for Everyday Life: Blending Qualitative and Quantitative Approaches. San Francisco: A Wiley Imprint 989 Market Street.