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

Course	Course Name	:	**Business Statistics Innovation**
	Course Code	:	SS234524
	Credit	:	5 SKS
	Semester	:	V

COURSE DESCRIPTION

Statistical Business Innovation is a group capstone project course, which is given to statistics students in semester 5. This course is packaged in 5 credits with five main materials, namely: 1) The concept of business innovation, including methods for developing business innovation (products, processes production, service and distribution) according to the needs of society and companies/institutions with the aim of expanding consumer reach), 2) Various methods of developing business innovation, 3) Various types of business innovation, 4) Innovation Management, 5) Business Planning and Digital Business. The implementation of this course consists of four activities, namely: face-to-face lectures, guest lectures from practitioners, business innovation planning project assignments in the form of statistical products and/or services, and a degree on the results of preparing business innovation planning in the field of statistics. In preparing business innovation plans in the field of statistics, guidance and presentation of results will be carried out

PROGRAM LEARNING OUTCOME

PLO-1   Able to demonstrate attitudes and character that reflect: devotion to God Almighty, ethics and integrity, noble character, sensitive and concerned about social and environmental problems, respecting cultural differences and pluralism, upholding law enforcement prioritizing the interests of the nation and society broad, through creativity and innovation, excellence, strong leadership, synergy, and other potential to achieve maximum results.

PLO-2   Able to study and utilize science and technology in order to apply them to certain areas of expertise, and able to make appropriate decisions from the results of one's own work or group work in the form of a final assignment report or other form of learning activity whose output is equivalent to the Final Assignment through thinking logical, critical, systematic and innovative.

PLO-3   Able to manage one's own learning, and develop oneself as a lifelong learner to compete at national and international levels, in order to make a real contribution to solving problems by implementing information and communication technology and paying attention to the principles of sustainability and understanding technology-based entrepreneurship.

PLO-4   Able to apply knowledge of Science and Mathematics to support understanding of Statistical methods

PLO-5   Able to apply statistical theory to statistical methods

PLO-6   Able to design, collect and manage data with the right methodology

PLO-7	Able to use modern computing devices to solve statistical problems
PLO-8	Able to use computational techniques 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	Apply knowledge of statistical and mathematical theory in the interpretation and presentation of data
CLO.2	Identify, formulate and analyze data using appropriate statistical methods
CLO.3	Evaluate problems according to hypothesis testing procedures
CLO.4	Able to make the right decisions based on analysis of information and data, and able to communicate the results of the analysis both orally and in writing

MAIN SUBJECT

1. Concept of Innovation: understanding innovation (Innovation) & discovery (Invention), History and milestones of innovation (Innovation history & milestone Innovation process Technology)

2. Innovation process, measuring innovation success (Innovation success measurement),

3. Various types of innovation, generic models of the innovation process, various types of innovation strategies,

4. Business communication techniques and project management in the field of statistics

5. Entrepreneurship, Innovation cash flow.

6. Business Planning: Definition and scope of business planning, market analysis, goods/services production planning, goods/services marketing planning, business organization planning, collaboration planning, financial planning, business risk management.

7. Digital Business: Basic concepts of e-business, Digital business planning (Startup), Digital marketing, Blockchain technology.

PREREQUISITE

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REFERENCES

1. Smith, David (2010), Exploring Innovation, 2nd Ed. London: Mc.Graw-Hill Education (UK) Limited

2. Tidd, Joe., Bessant, John (2009), Managing Innovation: Integrating Technological, Market and Organizational Change, 4th Ed, London, John Willey& Sons, Ltd

3. Sundbo, Jon., Fugisan, Lars (2002), Innovation as Strategic Reflexing, London, Routledge.

4. Annabeth Aagaard, (2019), Digital Business Models, Driving Transformation and Innovation, Aarhus University Risskov, Denmark, ISBN 978-3-319-96901-5 ISBN 978-3-319-96902-2 (eBook) https://doi.org/10.1007/978-3-319-96902-2, Library of Congress Control Number: 2018959874.

5. Paul Jackson, Lisa Harris and Peter M. Eckersley (2003), e-Business Fundamentals, Taylor & Francis e-Library.

6. Hasibuan, A., Jamaludin, Yuliana, Y., Sudirman, A., Wirapraja, A., Kusuma, A. H. P., Hwee, T. S., Napitupulu, D., Afriany, J., & Simarmata, J. (2020). E-Business: Implementasi, Strategi dan Inovasinya. Yayasan Kita Menulis.

7. https://majoo.id/solusi/detail/inovasi-bisnis