	Department of Education in Electronics and Informatics Engineering - Faculty of Engineering UNIVERSITAS NEGERI YOGYAKARTA	
	Lesson Plan	
	NO : RPS/PTE/EKA6260/2019	Last Update: August 1st 2019

Study Program : Bachelor of Education in Informatics Engineering
Course Name : Laboratory Work in Decision Support Systems***)
Course Code : EKA6260
Semester : 7
Num. of Credits : 2
Lecturer(s) : Dr. Aris Nashuha, M.T.

Learning Outcome / LO		
Type	**LO Code**	**LO Description**
A. Attitude :	A6	**Contribute** to improving the quality of life in a society, nation, state and the advancement of civilization based on Pancasila;
B. Knowledge :	B2	**Mastering** concepts, theories and applications in the field of computer and informatics engineering taught at the level of vocational secondary education;
C. Specific Skills :	C7	**Able** to apply mathematics, science, and engineering principles (engineering principles) to solve complex engineering problems in informatics and computer engineering;
	C8	**Able** to find sources of engineering problems in software systems, computer networks and multimedia;
	C10	**Able** to design programs according to customer requests with appropriate algorithms and program development opportunities;
D. Generic Skills :	D3	**Make** appropriate decisions in the context of problem solving in the field of computer engineering and informatics, based on the results of an analysis of information and data

Course Description

Decision Support System courses weight 2 credits, focusing on the use and application of information systems to support the decision making process. Knowledge-based systems, neural networks, expert systems, electronic meeting systems, group systems and web-based systems are discussed as a basis for designing and developing highly effective decision support systems. Data models, interactive processes, knowledge-based approaches, and integration with database systems are also explained. Theoretical concepts are applied to real world applications. At the end of the lecture students are expected to be able to choose the right modeling techniques to support semi-structured business decision making, identify and choose the right decision support system to produce innovative solutions, and design and implement decision support systems to produce innovative business solutions

Course Learning Outcome / CLO (CPMK)

a. Students are understand how computer technologies can assist managers in their work and learn the basic concepts of decision-making
b. Students are understand DSS configurations
c. Students are understand basic concepts of MSS modeling
d. Students are understand the concepts and use of DBMS
e. Students are understand the concepts of systems development and learn PADI, the phases of SDLC

f. Students are understand concepts and fundamentals of groupwork, communications, and collaboration
g. Students are understand the basic concepts in enterprise information systems
h. Students are understand the characteristics of knowledge management

Lesson Plan Matrix

Sub Course Learning Outcomes (Sub-CPMK)	Topics	Learning Method	Assessment Method	Assessment Weight	References
Students are understand how computer technologies can assist managers in their work and learn the basic concepts of decision-making	Management Support Systems: An Overview	Laboratory works, classroom demonstration	Assignment observation and demo presentation	10%	1,2
Students are understand DSS configurations	Decision Support Systems: An Overview	Laboratory works, classroom demonstration	Assignment observation and demo presentation	10%	1,2
Students are understand basic concepts of MSS modeling	Modeling and Analysis	Laboratory works, classroom demonstration	Assignment observation and demo presentation	15%	1,2
Students are understand the concepts and use of DBMS	Business Intelligence: Data Warehousing, Data Acquisition, Data Mining, Business Analytics, and Visualization	Laboratory works, classroom demonstration	Assignment observation and demo presentation	5%	1,2
Students are understand the concepts of systems development and learn PADI, the phases of SDLC	Decision Support System Development	Laboratory works, classroom demonstration	Assignment observation and demo presentation	15%	1,2
Students are understand concepts and fundamentals of groupwork, communications, and collaboration	Collaborative Computing Technologies: Group Support Systems	Laboratory works, classroom demonstration	Assignment observation and demo presentation	15%	1,2
Students are understand the basic concepts in enterprise information systems	Enterprise Information Systems	Laboratory works, classroom demonstration	Assignment observation and demo presentation	15%	1,2
Students are understand the characteristics of knowledge management	Knowledge Management	Laboratory works, classroom demonstration	Assignment observation and demo presentation	15%	1,2

Evaluation Rubrics

Laboratory Practicum

No	Aspect	Score and Criteria		
		3	2	1
1	Facilities	The whole equipment required is complete	Only Preparing some equipment required	Not preparing all equipment required
2	Skills to use equipment	Able to demonstrate how to use the equipment appropriately	Demonstrating how to use the equipment appropriately	Unable to use equipment
3	Suitability of practicum implementation and procedure	Able to run all steps of practicum procedure carefully	Able to run all steps of practicum procedure but less careful	Unable to run all steps of practicum procedure
4	Obtained Data	The data are complete, organized, and accurately written.	The data are complete but disorganized and inaccurately written.	The data are incomplete.

References

1. Aronson, Jay E., Ting-Peng Liang, and Efraim Turban. Decision support systems and intelligent systems. Vol. 4. New York: Pearson Prentice-Hall, 2005.
2. Turban, Efraim. Decision support and expert systems: management support systems. Prentice Hall PTR, 1993.