
SYLLABUS

Date/ Revision June 8, 2017
Faculty Business and Social Sciences
Approval Dean

SUBJECT : BUSINESS MANAGEMENT SYSTEMS DESIGN

1. Identification of Subject:

Name of Subject : Business Management Systems Design
Code of Subject : ELBM-9000
SKS/ECTS : 3 SKS
Semester : 5
Study Program : B-AVM/IBA/MGT
Lecturers : Ir. Invanos Tertiana, MBA, Dr. Ir. Prianggada Indra Tanaya, MME,
Dr. Ir. Tutuko Prajogo, MsMfgE, Dr. Ir. Yuki Indrayadi, MME, Dr.
Satiri & Dr. Samuel Prasetya

2. Competency

After having the course, students are expected to:

- a) be able to integrate their previous knowledge in production planning and control, production techniques, automation and robotics
- b) to design a factory with including the aspect of industrial management, industrial sociology and industrial psychology

3. Description of Subject:

This course is a project based group work of synthesizing development of product toward manufacturing product and/or services industries. This subject is an integration of lectures and subjects, which have been previously discussed. Starting from abstract of product, product creation, designing factory resources, and developing the factory, including layout, machines, human operator, organization, information systems and many more. This course offers students to understand how the functional areas of business have to be coordinated in the economy, technology, global competition, and consumer decision making continues to evolve. All these changes are presented in concepts that entry-level students can understand.

4. Learning Approach

Approach : Combination of expository - inquiry and collaborative
Method : Discussions, questions/answers, sample problems/cases
Student Task : Quizzes and group projects
Media : LCD projector

5. Evaluation

- a) Non-attendance maximum : 25%
- b) Homework/Projects : 20 points

- c) Presentation, Simulation : 10 points
 d) Quiz : 10 points
 e) Final Examination : 60 points
 Total : 100 points

6. Contents/Topics of Lecturing:

Week	Topics	Content	Remark
1	Introduction	Introduction to project and group work, requirement of system design in industrial engineering, progress of work discussion	
2,3,4	Development and progress report 25%	System Requirement, Early Design, product description, etc.	Presentation
5,6,7	Development and progress report 50%	System Requirement, factory design	Presentation
8	Mid-term qualification		
9,10,11	Development and progress report 75%	Change requirement 1, System update design	Presentation
12,13,14	Development and progress report 100%	Change requirement 2, System update design	Presentation
15	Final presentation		
16, 17	Final Examination		

7. Book Reference:

a) Main Textbook

- Wayne C. Turner, Joe H. Mize, Kenneth E. Case and John W. Nazemetz, **Introduction to Industrial and Systems Engineering**, Prentice-Hall, 1993
- Fred E. Meyers, Matthew P. Stephens, **Manufacturing Facilities Design and Material Handling**, 3rd ed., Pearson Prentice-Hall, NJ, 2005