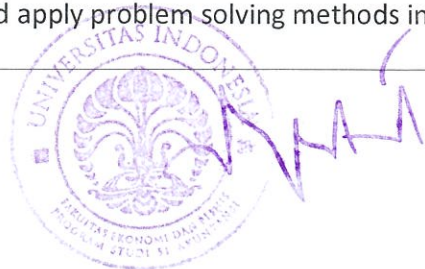UNIVERSITAS INDONESIA

FACULTY OF ECONOMICS AND BUSINESS

DEPARTMENT OF ACCOUNTING

UNDERGRADUATE PROGRAM

SYLLABUS

Analisis Keputusan Bisnis
Analytics in Business Decision
ECAU609102
EVEN SEMESTER 2020/2021

No.	Lecturer	E-mail
1	Tubagus Yusuf Khudri	
2	Sally Taher	Sally.taher@redwhite-consulting.com
3	Sean Taher	Sean.taher@houseofanalytics.com
4	Salsabila Raihana Radian	Sarah.radian@redwhite-consulting.com

Subject Code	ECAU609102
Subject Title	Analytics in Business Decision
Credit Value	3
Pre-requisite/ Co-requisite/ Exclusion	
Role and Purposes	This course provides business analytical competencies that can be used to prepare, analyze information for managerial decision making
Subject Learning Outcomes	Upon completion of the subject, student will have:

Technical Competence in

    a. Accounting and Related field: be able explain how data & analytics, supported by information and technology, contributes to decision making in business environment.

In details:

    1. Students are able to understand and apply analytical framework for managerial decision making
    2. Students are able to explain the background and process of business analytics
    3. Students are able to prepare and implement analytics processes for managerial decision making
    4. Students are able to explain and apply problem solving methods in business cases |

		5. Students are able to create evaluation framework for business decisions 6. Students are able to design recommendation for certain business cases 7. Students are able to visually present the thought process and recommendation for certain business cases		
Subject Synopsis/ Indicative Syllabus	Week #	Topic	LO	References
	1	Introduction to Business Analytics • What is analytics? • Why do we need analytics? • Evolution in analytics • Development stages in analytics	a	Reading List & Reference: 1, 2, 3

	2	Introduction to Business Analytics
		• Roles and application of analytics
		• Business case: How is analytics applied?
		   o Case of Human Capital Analytics: Singapore Airlines
		   o Case of Customer Analytics: Mandiri Digital Marketing
		   o Boston Citywide Analytics
			a	Reading List & Reference: 1, 2, 3

	3	Introduction to Analytics Concept: What, Why, and How? • Ask • Acquire • Analyse • Act	a	Reading List & Reference: 1, 2, 3
	4	What, Why, and How: What are we observing? • Problem framing • Types of business problems • Recognising ambiguity & equivocality • Descriptive data exercise	a	Reading List & Reference: 1, 2, 3
	5	What, Why and How: Why is this happening? • Diagnostic analytics • 7-Step process of problem solving • Developing hypothesis	a	Reading List & Reference: 1, 2, 3
	6	What, Why and How: Why is this happening? • Mind mapping: Connecting the dots		Reading List & Reference: 1, 2, 3

		• Analytics case study: Cholera exercise • Business case study: Fraud exercise		
	7	What, Why and How: How to take action? • Validating hypothesis • Identify analytics solution • Impact vs Feasibility • Defining success metrics	a	Reading List & Reference: 1, 2, 3
	Mid Term Exam			
	8	What, Why and How: How to take action? • Operationalisation • Success monitoring • Exercise: Making action plan • Business case study: Analytics in life insurance	a	Reading List & Reference: 1, 2, 3
	9	Data Visualisation • Visual data exploration • Data storytelling • Visual Vocabulary	a	Reading List & Reference: 6
	10	Data Visualization • Presenting your idea with data: Tableau exercise • Creative visual application in making presentation	A	Reading List & Reference: 6
	11	Design Thinking • What is design thinking? • Preparing your mind for innovation • Generating idea • Analytics experimentation • Design thinking application	a	Reading List & Reference: 4, 5
	12	Evaluation: Design recommendation Students will choose a business problem they want to focus on. Students will be asked to present their evidence and give solution. Lecturer will give feedback based on the presentation	a	
	13	Evaluation: Design recommendation Students will choose a business problem they want to focus on. Students will be asked to present their evidence and give solution. Lecturer	a	

		will give feedback based on the presentation		
	14	Evaluation: Design recommendation Students will choose a business problem they want to focus on. Students will be asked to present their evidence and give solution. Lecturer will ask questions to evaluate students' understanding	a	
		Final Exam		

Teaching/Learning Methodology	This course will use various teaching/learning approach, including collaborative learning/case-based learning

Assessment Method in Alignment with Intended Learning Outcomes			

Assessment	% weight	Intended Learning Outcomes to be assessed
		a
Group	**50%**	
Final Project Presentation	30%	
Group Assignment	20%	
Individual	**50%**	
Mid Term Exam (closed book)	30%	
Quiz	15%	
Active Participation	5%	

Student Study Effort Expected		

Class Contacts	
Lectures	17.5 Hours
Group Discussion	10 Hours
Presentation & Class Discussion	7.5 Hours
Sub Total	**35 Hours**
Other student study effort	
Preparation for discussion	25 Hours
Independent Study	25 Hours
Total	**85 Hours**

Reading List and References	Required Readings:

1. Evans, J. R. (2016). Business Analytics, Global Edition. [VitalSource Bookshelf]. Retrieved from https://bookshelf.vitalsource.com/#/books/9781292095455/
2. Taylor, B. W. (2018). Introduction to Management Science, Global Edition. [VitalSource Bookshelf]. Retrieved from https://bookshelf.vitalsource.com/#/books/9781292263076/

	3. Adair, J. (2019). Decision Making and Problem Solving: Break Through Barriers and Banish Uncertainty at Work (Creating Success) (4th ed.). Kogan Page.
	4. Lewrick, M., Link P., Leifer L. (2018) The Design Thinking Playbook: Mindful Digital Transformation of Teams, Products, Services, Businesses and Ecosystems, Wiley
	5. Frisendal, T. (2014). Design Thinking Business Analysis: Business Concept Mapping Applied (Management for Professionals) (2012th ed.). Springer.
	6. Loth, A. (2019). Visual Analytics with Tableau (1st ed.). Wiley.