


Course Outline	
STAT6021 Research Methodology (2)	
Effective Date 01 September 2015	Study Program Statistics Revision 0

1. Course Description

This course comprises Introduction to Research Methodology, Problem Definition: The Foundation of Business Research, Qualitative Research Tools, Survey Research, Measurement and Scaling Concepts, Sampling Design and Sampling Procedures, Basic Data Analysis, and Communicating Research Results. This course will focus on providing a practical understanding of several statistics tools used in research. This course is related to Thesis or Final Project.

2. Graduate Competency

Each course in the study program contributes to the graduate competencies that are divided into employability and entrepreneurial skills and study program specific outcomes, in which students need to have demonstrated by the time they complete their course.

BINUS University employability and entrepreneurial skills consist of planning and organizing, problem solving and decision making, self management, team work, communication, and initiative and enterprise.

2.1. Employability and Entrepreneurial Skills

Aspect	Key Behaviour

2.2. Study Program Specific Outcomes

Study Program Specific Outcomes
Able to apply knowledge and understanding of mathematical concepts, principles and theories relating to computer science knowledge.
Graduates will be able to design systems that are aligned with organizational goals.

3. Topics

- Introduction to Research Methodology
- Problem Definition: The Foundation of Business Research
- Qualitative Research Tools
- Survey Research
- Measurement and Scaling Concepts
- Sampling Designs and Sampling Procedures
- Basic Data Analysis
- Communicating Research Results

4. Learning Outcomes

On successful completion of this course, student will be able to:

- LO 1: Describe the basics of research methodology and the research report
- LO 2: Choose appropriate sampling and research design
- LO 3: Construct questionnaires, measurement and scaling, and research proposal
- LO 4: Interpret the results of statistics calculation

5. Teaching And Learning Strategies

In this course, the lecturers might deploy several teaching learning strategies, including case studies, Lecture, and Individual and Group Presentation.

6. Textbooks and Other Resources

6.1 Textbooks

1. Zikmund, Babin, Carr, and Griffin. (2009). *Business Research Methods*. 08. Thomson South-Western. ISBN: 978-0324320626.

The book in the first list is a must to have for each student.

6.2 Other Resources

1. <http://www.youtube.com/watch?v=2X6qD3x5wQQ>
2. <http://dept.stat.lsa.umich.edu/~kshedden/Courses/Stat401/Notes/401-bivariate-slides.pdf>
3. http://www.sagepub.com/upm-data/4553_Smith_Chp_10.pdf
4. Prosedur dan Petunjuk Skripsi/Tugas Akhir SoCS
5. Prosedur dan Petunjuk Skripsi/Tugas Akhir SoIS
6. <http://www.ccs.neu.edu/course/is4800sp12/resources/qualmethods.pdf>
7. <http://www.limat.org/data/research/Research%20Methodology.pdf>
8. http://www.ssc.wisc.edu/~jraymo/links/soc357/class8_F09.pdf
9. http://www.sagepub.com/upm-data/43589_8.pdf
10. http://www.dlweb.rmit.edu.au/lisu./content/2_AssessmentTasks/assess_pdf/research_report.pdf

7. Schedule

Theory			
Session/ Mode	Related LO	Topics	References
1 F2F	LO 1	Introduction to Research Methodology - The Business Research Process: An Overview	- Introduction to Research Methodology - Business Research Methods, - Research Methodology: An Introduction, http://www.limat.org/data/research/Research%20Methodology.pdf - Exercises 1
2 F2F	LO 1	Problem Definition: The Foundation of Business Research - The problem-Definition Process - The Research Proposal	- Problem Definition: The Foundation of Business Research - Business Research Methods, - Prosedur dan Petunjuk Skripsi/Tugas Akhir SoCS - Prosedur dan Petunjuk Skripsi/Tugas Akhir SoIS - Exercises 2
3 F2F	LO 1 LO 2	Qualitative Research Tools - Common Techniques used in Qualitative Research - Orientations to Qualitative Research - Qualitative “versus” Quantitative Research - What is Qualitative Research?	- Qualitative Research Tools - Business Research Methods, - Qualitative Research Methods Overview, http://www.ccs.neu.edu/course/is4800sp12/resources/qualmethods.pdf - Exercises 3
4 GSLC	LO 1 LO 2	Qualitative Research Tools - Common Techniques used in Qualitative Research - Orientations to Qualitative Research - Qualitative “versus” Quantitative Research - What is Qualitative Research?	- Qualitative Research Tools - Business Research Methods, - Qualitative Research Methods Overview, http://www.ccs.neu.edu/course/is4800sp12/resources/q

			ualmethods.pdf - Exercises 3
5 F2F	LO 1 LO 2	Survey Research - An Overview - Communicating with Respondents	- Survey Research - Business Research Methods, - Survey Research, http://www.sagepub.com/upm-data/43589_8.pdf - Exercises 4
6 F2F	LO 1 LO 2	Survey Research - An Overview - Communicating with Respondents	- Survey Research - Business Research Methods, - Survey Research, http://www.sagepub.com/upm-data/43589_8.pdf - Exercises 4
7 F2F	LO 1 LO 3	Measurement and Scaling COncepts - Attitude Measurement - Index Measures - Levels of Scale Measurement - Questionnaire Design - What do I Measure?	- Measurement and Scaling Concepts - Business Research Methods, - Measurement and Scaling in Marketing Research, http://www.sagepub.com/upm-data/4553_Smith_Chapter_10.pdf - Exercises 5
8 F2F	LO 1 LO 3	Measurement and Scaling COncepts - Attitude Measurement - Index Measures - Levels of Scale Measurement - Questionnaire Design - What do I Measure?	- Measurement and Scaling Concepts - Business Research Methods, - Measurement and Scaling in Marketing Research, http://www.sagepub.com/upm-data/4553_Smith_Chapter_10.pdf - Exercises 5
9 GSLC	LO 1 LO 3	Measurement and Scaling COncepts - Attitude Measurement - Index Measures - Levels of Scale Measurement - Questionnaire Design - What do I Measure?	- Measurement and Scaling Concepts - Business Research Methods, - Measurement and Scaling in Marketing Research, http://www.sagepub.com/upm-data/4553_Smith_Chapter_10.pdf - Exercises 5
10 F2F	LO 1 LO 2	Sampling Designs and Sampling Procedures - Practical Sampling Concepts - Probability versus Nonprobability Sampling - Random Sampling and Nonsampling Errors - Sampling Terminology - What is the Appropriate Sample Design? - Why Sample?	- Sampling Designs and Sampling Procedures - Business Research Methods, - AP Statistics: Simple Random Sampling Design, http://www.youtube.com/watch?v=2X6qD3x5wQQ - Sampling Designs, http://www.ssc.wisc.edu/~jraymo/links/soc357/class8_F09.pdf - Exercises 6
11 F2F	LO 1 LO 2	Sampling Designs and Sampling Procedures - Practical Sampling Concepts - Probability versus Nonprobability Sampling - Random Sampling and Nonsampling Errors	- Sampling Designs and Sampling Procedures - Business Research Methods, - AP Statistics: Simple

		<ul style="list-style-type: none"> - Sampling Terminology - What is the Appropriate Sample Design? - Why Sample? 	Random Sampling Design, http://www.youtube.com/watch?v=2X6qD3x5wQQ - Sampling Designs, http://www.ssc.wisc.edu/~jraymo/links/soc357/class8_F09.pdf - Exercises 6
12 GSLC	LO 4	Basic Data Analysis <ul style="list-style-type: none"> - Descriptive Statistics - Univariate and Bivariate Statistical Analysis 	<ul style="list-style-type: none"> - Univariate and Bivariate Statistical Analysis - Business Research Methods, - Introduction to Bivariate Analysis, http://dept.stat.lsa.umich.edu/~kshedden/Courses/Stat401/Notes/401-bivariate-slides.pdf - Exercises 7
13 F2F	LO 1 LO 3	Communicating Research Results <ul style="list-style-type: none"> - The Oral Presentation - The Research Follow Up - The Research Report 	<ul style="list-style-type: none"> - How to write a Research Report - Business Research Methods, - Writing a research report, http://www.dlsweb.rmit.edu.au/lisu./content/2_AssessmentTasks/assess_pdf/research_report.pdf - Exercises 8

8. Evaluation
 Theory

Assessment Activity	Weight	Learning Outcomes			
		1	2	3	4
Assignment	25%	√	√	√	√
Mid Exam	35%	√	√		
Final Exam	40%	√		√	√

Practicum

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Final Evaluation Score

Aspects	Weight
Theory	100%
Practicum	0%

9. A. Assessment Rubric (Study Program Specific Outcomes)

LO	Indicators	Proficiency Level			
		Excellent (85 – 100)	Good (75 – 84)	Average (65 – 74)	Poor (<= 64)
LO 1	1.1. Ability to explain the basics of research	The explanations of basics research are clearly stated with correct example	The explanations of basics research are clearly stated with incorrect example	The explanations of basics research are not clearly stated with correct example	The explanations of basics research are not clearly stated with incorrect example
	1.2. Ability to explain the research report	The explanations of the research report are clearly stated.	The explanations of the research report are well stated.	The explanations of the research report are less appropriate.	The explanations of the research report are inappropriate.
LO 2	2.1. Ability to choose the sampling design	The sampling design is appropriate and the reasons are clearly stated.	The sampling design is appropriate and the reasons are well stated.	The sampling design is appropriate and the reasons are less appropriate.	The sampling design is inappropriate.
	2.2. Ability to choose the research design	The research design is appropriate and the reasons are clearly stated.	The research design is appropriate and the reasons are well stated	The research design is appropriate and the reasons are less appropriate.	The research design is inappropriate
LO 3	3.1. Ability to construct questionnaires according to the problems	The constructed questionnaires are correct, complete, and clearly stated	The constructed questionnaires are correct and clearly stated but not complete	The constructed questionnaires are correct but not complete, and not clearly stated	The constructed questionnaires are incorrect
	3.2. Ability to select the measurements and scales.	The measurements and scales are appropriate and the reasons are clearly stated.	The measurements and scales are appropriate and the reasons are well stated.	The measurements and scales are appropriate and the reasons are less appropriate.	The measurements and scales are inappropriate.
	3.3. Ability to construct research proposal	The constructed proposal is correct,	The constructed proposal is correct and	The constructed proposal is correct but	The constructed proposal is incorrect

		complete, and clearly stated	clearly stated but not complete	not complete and not clearly stated	
LO 4	4.1. Ability to interpret the results of statistics calculation	The interpretations of statistics calculation is clearly stated.	The interpretations of statistics calculation is well stated.	The interpretations of statistics calculation is less appropriate.	The interpretations of statistics calculation is inappropriate.
	4.2. Ability to describe the conclusion which related to the results of statistics calculation	The conclusion is clearly stated.	The conclusion is well stated.	The conclusion is less appropriate.	The conclusion is inappropriate.

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