



TEACHING-LEARNING CONTRACT
LEARNING PROGRAM OUTLINE
LEARNING UNIT PROGRAM

STATISTICAL
METHOD I
PAS 101

UPT-POST X GROUP
No. Daft: 0067/BA/PMIPA/C1
Tgl. : 16-6-'09

STATISTICS STUDY PROGRAM OF MATHEMATICS DEPARTMENT
MATHEMATICS AND SCIENCE FACULTY
DIPONEGORO UNIVERSITY
SEMARANG
2007

TEACHING-LEARNING CONTRACT

Course Title : Statistical Method I

Code : PAS 101

Credit : 3

Semester : I

1. Course Advantage

Statistical method I is a scientific study that study about on descriptive statistical and inferences statistical. Statistic relating with data and probability. On descriptive statistical contain with frequency distribution, some properties of expected value, and standard deviation. Statistical methods is an introduction from the others statistical analysis. Statistical method use in industrial, education, technic, mechanical, electrical engineering and so on. The inferences statistical contains hypothesis test, parameter estimation and interval estimation to give a decision making about existing data.

2. Course Description

This lecture represent to study about descriptive statistical and inferences statistical . Deskriptive statistical contain with frequency distribution, some properties of expected value, and standard deviation, distribution of random variable discrete and continu. While inferences statistical contain hypothesis test and estimation, simple linear regression analysis and one way analysis of variansi

3. General Instructional Aim

After studying this course, the student are expected to be able to explain concepts something of modern statistika along with its because it is important the statistical model as base data analysis

4. Lecture Strategic

This lecturing uses two way teaching methods, that is lecturing and discuss. Each every student expected to earn active to ask concepts or things which still not yet been comprehended and or submit idea under consideration in the form of personal opinion which obtained from fact exist in its environment or which is obtained from source of bibliography which have been read.

5. References

1. Mustafid, 2003. *Statistika Elementer metode dan aplikasi dengan SPSS*. Jurusan Matematika FMIPA Undip, Semarang
2. Sembiring, R.K, Dr. 1986. *Ilmu Peluang dan Statistika untuk Insinyur dan Ilmuwan*. Penerbit ITB Bandung
3. Soejoeti, Zanzawi. 2003. *Materi Pokok Metode Statistik I*. Penerbit Karunika Jakarta Universitas Terbuka , Edisi ke satu
4. Triastuti Wuryandari, Msi dan Hasbi Yasin, S.Si, 2005. *Petunjuk Praktikum Metode Statistik I*. Lab. Statistik jurusan Matematika FMIPA Undip semarang

6. Scoring Criteria

Criteria of scoring in this course is

A	4.0
AB	3.5
B	3.0
BC	2.5
C	2.0
CD	1.5
D	1.0
E	0.0

Scoring in this course title consist of three component, that is task, quiz, and examination. Examination will be held twice, that is mid-term and final exam. Midterm exam is arranged after seventh lecturing, while final exam item is arranged after fourteenth lecturing. Tasks consist of individual task and group task. Quiz is unscheduled programs.

Final score decision is based on this scoring indicator such as:

No	Component	Percentage
1.	Quiz	20 %
2.	Group Task and Individual Task	20 %
3.	Midterm	30 %
4.	Final Exam	30 %
	TOTAL	100%

9. Lecture Schedule

Week	Material	Reference
1	Introduction to Statistika; Data, Process used scales and measurement	[1] 1-32 [3] 1.1-1.32
2	Deskriptive statistical contain with frequency distribution, some properties of expected value, and standard deviation,	[1] 14-36 [3] 2.1-2.44 [4] 5-6
3	Elements of Probability contain of sample space and event , probability and conditional probability	[1] 37-47 [3] 3.1-3.39 [4] 5-6
4	Distribution of random variable contain random variable and distribution of probability, expectation , variance and its properties, two random variable and properties of probability	[1] 37-47 [2] 34-79 [3] 4.1-4.41
5	Some probability distribution of discrete random variables (Binomial and Poisson)	[1] 48-54 [2] 90-112 [3] 5.1-5.32
6	Normal Distribution and random sample.	[1] 55-63 [2] 120-138 [3] 6.1-6.47
7	Introduction of SPSS.	[4] 1-3
8	Midterm.	
9 and 10	Elementary Concepts [of] inferensi.	[1] 62-78 [2] 203-278 [3] 7.1-7.35 8.1-8.26 9.1-9.40
11 and 12	Method of Kolmogorov and Smirnov.	[1] 92-95 [2] 284-287
13	Simple Linear Regression Analysis	[1] 96-113 [2] 300-324
14	One way of variance analysis	[1] 123-129 [2] 390-401
15	test mean one sampel and two sampel.	[4] 4-10
16	Final Exam	

LEARNING UNIT PROGRAM

COURSE TITLE : STATISTICAL METHOD I

CODE / CREDIT : PAS 101 / 3 CREDIT

DURATION : 150 MINUTES

WEEK : 1

A. INSTRUCTIONAL AIM :

1. GENERAL : After studying this course, the student are expected to be able to explain concepts something of modern statistika along with its because it is important the statistical model as base data analysis

2. SPECIFIC : After studying this course, students are expected to have ability explaining meaning of statistika and also explain data, process scales and measurement

B. SUBJECT : The meaning of Statistical

C. SUB SUBJECT : The meaning of Statistical ; data, process scales and measurement

D. TEACHING-LEARNING ACTIVITIES

STAGE	LECTURER ACTIVITIES	STUDENT ACTIVITIES	LEARNING MEDIA
INTRODUCTION	<ul style="list-style-type: none">▪ Describing about matter at the first meeting▪ Describing about general and specific objectives competence	Observing and taking notes	OHP, transparency, white board, reference book, and paper
PRESENTATION	<ul style="list-style-type: none">▪ Describing about the meaning of statistical ; data, process scale and measurement▪ Giving examples as a study case and solving together	Observing, asking, taking notes	OHP, transparency, white board, reference book, and paper
CLOSING	<ul style="list-style-type: none">▪ Discussion▪ Giving description about matter on the next meeting	Discuss, asking, observing, taking notes	white board and paper

E. ASSESSMENT : Giving problems to the students.

F. REFERENCE :

1. Mustafid, 2003. *Statistika Elementer metode dan aplikasi dengan SPSS*. Jurusan Matematika FMIPA Undip, Semarang
2. Sembiring, R.K, Dr. 1986. *Ilmu Peluang dan Statistika untuk Insinyur dan Ilmuwan*. Penerbit ITB Bandung
3. Soejoeti, Zanzawi. 2003. *Materi Pokok Metode Statistik I*. Penerbit Karunika Jakarta Universitas Terbuka , Edisi ke satu
4. Triastuti Wuryandari, Msi dan Hasbi Yasin, S.Si, 2005. *Petunjuk Praktikum Metode Statistik I*. Lab. Statistik jurusan Matematika FMIPA Undip semarang

LEARNING UNIT PROGRAM

COURSE TITLE : STATISTICAL METHOD I
CODE / CREDIT : PAS 101 / 3 CREDIT
DURATION : 150 MINUTES
WEEK : 2

A. INSTRUCTIONAL AIM :

1. GENERAL : After studying this course, the student are expected to be able to explain concepts something of modern statistika along with its because it is important the statistical model as base data analysis
2. SPECIFIC : After studying this course, the student can summarize data result of attempt in graph and table and also can calculated important value a group of data

B. SUBJECT : Discriptive statistical

C. SUB SUBJECT : Frequency distribution, some properties of expected value, and standard deviation.

D. TEACHING-LEARNING ACTIVITIES

STAGE	LECTURER ACTIVITIES	STUDENT ACTIVITIES	LEARNING MEDIA
INTRODUCTION	<ul style="list-style-type: none">▪ Describing about matter at the second meeting▪ Describing about general and specific objectives competence▪ Explaining descriptive statistical	Observing and taking notes	OHP, transparency, white board, reference book, and paper
PRESENTATION	<ul style="list-style-type: none">▪ Explaining about frequencies distribution, some properties of expected value and standard deviation▪ Giving examples as a study case and solving together▪ Giving Task I (Individual Task)	Observing, asking, taking notes	OHP, transparency, white board, reference book, and paper
CLOSING	<ul style="list-style-type: none">▪ Discussion▪ Giving description about matter on the next meeting	Discuss, asking, observing, taking notes	white board and paper

E. ASSESSMENT : Giving problems to the students.

F. REFERENCE :

1. Mustafid, 2003. *Statistika Elementer metode dan aplikasi dengan SPSS*. Jurusan Matematika FMIPA Undip, Semarang
2. Sembiring, R.K, Dr. 1986. *Ilmu Peluang dan Statistika untuk Insinyur dan Ilmuwan*. Penerbit ITB Bandung
3. Soejoeti, Zanzawi. 2003. *Materi Pokok Metode Statistik I*. Penerbit Karunika Jakarta Universitas Terbuka , Edisi ke satu
4. Triastuti Wuryandari, Msi dan Hasbi Yasin, S.Si, 2005. *Petunjuk Praktikum Metode Statistik I. Lab. Statistik jurusan Matematika FMIPA Undip semarang*

LEARNING UNIT PROGRAM

COURSE TITLE : STATISTICAL METHOD I

CODE / CREDIT : PAS 101 / 3 CREDIT

DURATION : 150 MINUTES

WEEK : 3

A. INSTRUCTIONAL AIM :

1. GENERAL : After studying this course, the student are expected to be able to explain concepts something of modern statistika along with its because it is important the statistical model as base data analysis

2. SPECIFIC : After studying this course, the student can define probability and do calculations various probability.

B. SUBJECT : Probability elements.

C. SUB SUBJECT : The sample space and even, an even probability, and conditional probability

D. TEACHING-LEARNING ACTIVITIES

STAGE	LECTURER ACTIVITIES	STUDENT ACTIVITIES	LEARNING MEDIA
INTRODUCTION	<ul style="list-style-type: none">▪ Describing about matter at the third meeting▪ Describing about general and specific objectives competence▪ Explaining concept of probability elements	Observing and taking notes	OHP, transparency, white board, reference book, and paper
PRESENTATION	<ul style="list-style-type: none">▪ Explaining about the sample space and even, an even probability and conditional probability▪ Giving examples as a study case and solving together	Observing, asking, taking notes	OHP, transparency, white board, reference book, and paper
CLOSING	<ul style="list-style-type: none">▪ Discussion▪ Giving description about matter on the next meeting	Discuss, asking, observing, taking notes	white board and paper

E. ASSESSMENT : Giving problems to the students.

F. REFERENCE :

1. Mustafid, 2003. *Statistika Elementer metode dan aplikasi dengan SPSS*. Jurusan Matematika FMIPA Undip, Semarang
2. Sembiring, R.K, Dr. 1986. *Ilmu Peluang dan Statistika untuk Insinyur dan Ilmuwan*. Penerbit ITB Bandung
3. Soejoeti, Zanzawi. 2003. *Materi Pokok Metode Statistik I*. Penerbit Karunika Jakarta Universitas Terbuka , Edisi ke satu
4. Triastuti Wuryandari, Msi dan Hasbi Yasin, S.Si, 2005. *Petunjuk Praktikum Metode Statistik I*. Lab. Statistik jurusan Matematika FMIPA Undip semarang

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COURSE TITLE : STATISTICAL METHOD I

CODE / CREDIT : PAS 101 / 3 CREDIT

DURATION : 150 MINUTES

WEEK : 4

A. INSTRUCTIONAL AIM :

1. GENERAL : After studying this course, the student are expected to be able to explain concepts something of modern statistika along with its because it is important the statistical model as base data analysis

2. SPECIFIC : After studying this course, the student can explain result of quantitative attempt as random variable random and its properties and also calculate the expected value

B. SUBJECT : Random variable and their distributions

C. SUB SUBJECT : Random variable and their distributions, some properties of expected value and variance, some properties of two random variable

D. TEACHING-LEARNING ACTIVITIES

STAGE	LECTURER ACTIVITIES	STUDENT ACTIVITIES	LEARNING MEDIA
INTRODUCTION	<ul style="list-style-type: none"> ▪ Describing about matter at the fourth meeting ▪ Describing about general and specific objectives competence ▪ Explaining Random variable and their distributions 	Observing and taking notes	OHP, transparency, white board, reference book, and paper
PRESENTATION	<ul style="list-style-type: none"> ▪ Explaining about the Random variable and their distributions ▪ Explaining about some properties of expected value and variance, some properties of two random variable ▪ Giving examples as a study case and solving together ▪ Giving Task II (Group Task) 	Observing, asking, taking notes	OHP, transparency, white board, reference book, and paper

CLOSING	<ul style="list-style-type: none"> ▪ Discussion ▪ Giving description about matter on the next meeting 	Discuss, asking, observing, taking notes	white board and paper
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E. ASSESSMENT : Giving problems to the students.

F. REFERENCE :

1. Mustafid, 2003. *Statistika Elementer metode dan aplikasi dengan SPSS*. Jurusan Matematika FMIPA Undip, Semarang
2. Sembiring, R.K, Dr. 1986. *Ilmu Peluang dan Statistika untuk Insinyur dan Ilmuwan*. Penerbit ITB Bandung
3. Soejoeti, Zanzawi. 2003. *Materi Pokok Metode Statistik I*. Penerbit Karunika Jakarta Universitas Terbuka , Edisi ke satu
4. Triastuti Wuryandari, Msi dan Hasbi Yasin, S.Si, 2005. *Petunjuk Praktikum Metode Statistik I. Lab. Statistik jurusan Matematika FMIPA Undip semarang*

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COURSE TITLE : STATISTICAL METHOD I

CODE / CREDIT : PAS 101 / 3 CREDIT

DURATION : 150 MINUTES

WEEK : 5

A. INSTRUCTIONAL AIM :

1. GENERAL : After studying this course, the student are expected to be able to explain concepts something of modern statistika along with its because it is important the statistical model as base data analysis

2. SPECIFIC : After studying this course, the student can explain some properties of probability distribution and also can chosen appropriate probability model.

B. SUBJECT : Special probability distribution

C. SUB SUBJECT : Binomial distribution and poisson distribution

D. TEACHING-LEARNING ACTIVITIES

STAGE	LECTURER ACTIVITIES	STUDENT ACTIVITIES	LEARNING MEDIA
INTRODUCTION	<ul style="list-style-type: none">▪ Describing about matter at the fifth meeting▪ Describing about general and specific objectives competence▪ Explaining some of special probability distribution	Observing and taking notes	OHP, transparency, white board, reference book, and paper
PRESENTATION	<ul style="list-style-type: none">▪ Explaining about the binomial distribution and poisson distribution▪ Giving examples as a study case and solving together	Observing, asking, taking notes	OHP, transparency, white board, reference book, and paper
CLOSING	<ul style="list-style-type: none">▪ Discussion▪ Giving description about matter on the next meeting	Discuss, asking, observing, taking notes	white board and paper

E. ASSESSMENT : Giving problems to the students.

F. REFERENCE :

1. Mustafid, 2003. *Statistika Elementer metode dan aplikasi dengan SPSS*. Jurusan Matematika FMIPA Undip, Semarang
2. Sembiring, R.K, Dr. 1986. *Ilmu Peluang dan Statistika untuk Insinyur dan Ilmuwan*. Penerbit ITB Bandung
3. Soejoeti, Zanzawi. 2003. *Materi Pokok Metode Statistik I*. Penerbit Karunika Jakarta Universitas Terbuka , Edisi ke satu
4. Triastuti Wuryandari, Msi dan Hasbi Yasin, S.Si, 2005. *Petunjuk Praktikum Metode Statistik I*. Lab. Statistik jurusan Matematika FMIPA Undip semarang

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COURSE TITLE : STATISTICAL METHOD I

CODE / CREDIT : PAS 101 / 3 CREDIT

DURATION : 150 MINUTES

WEEK : 6

A. INSTRUCTIONAL AIM :

1. GENERAL : After studying this course, the student are expected to be able to explain concepts something of modern statistika along with its because it is important the statistical model as base data analysis

2. SPECIFIC : After studying this course, the student can explain normal distribution and can calculate probability as wide of normal curve.

B. SUBJECT : Normal distribution and random variable

C. SUB SUBJECT : Normal distribution and random sample

D. TEACHING-LEARNING ACTIVITIES

STAGE	LECTURER ACTIVITIES	STUDENT ACTIVITIES	LEARNING MEDIA
INTRODUCTION	<ul style="list-style-type: none">▪ Describing about matter at the sixth meeting▪ Describing about general and specific objectives competence▪ Explaining about the normal distribution and random variable	Observing and taking notes	OHP, transparency, white board, reference book, and paper
PRESENTATION	<ul style="list-style-type: none">▪ Explaining about the normal distribution and random sample▪ Giving examples as a study case and solving together	Observing, asking, taking notes	OHP, transparency, white board, reference book, and paper
CLOSING	<ul style="list-style-type: none">▪ Discussion▪ Giving description about matter on the next meeting	Discuss, asking, observing, taking notes	white board and paper

E. ASSESSMENT : Giving problems to the students.

F. REFERENCE :

1. Mustafid, 2003. *Statistika Elementer metode dan aplikasi dengan SPSS*. Jurusan Matematika FMIPA Undip, Semarang
2. Sembiring, R.K, Dr. 1986. *Ilmu Peluang dan Statistika untuk Insinyur dan Ilmuwan*. Penerbit ITB Bandung
3. Soejoeti, Zanzawi. 2003. *Materi Pokok Metode Statistik I*. Penerbit Karunika Jakarta Universitas Terbuka , Edisi ke satu
4. Triastuti Wuryandari, Msi dan Hasbi Yasin, S.Si, 2005. *Petunjuk Praktikum Metode Statistik I. Lab. Statistik jurusan Matematika FMIPA Undip semarang*

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COURSE TITLE : STATISTICAL METHOD I

CODE / CREDIT : PAS 101 / 3 CREDIT

DURATION : 150 MINUTES

WEEK : 7

A. INSTRUCTIONAL AIM :

1. GENERAL : After studying this course, the student are expected to be able to explain concepts something of modern statistika along with its because it is important the statistical model as base data analysis

2. SPECIFIC : After studying this course, the student can use SPSS program as one of the data-processing

B. SUBJECT : Introduction to SPSS

C. SUB SUBJECT : Entry data, Edit data and descriptive statistical

D. TEACHING-LEARNING ACTIVITIES

STAGE	LECTURER ACTIVITIES	STUDENT ACTIVITIES	LEARNING MEDIA
INTRODUCTION	<ul style="list-style-type: none"> ▪ Describing about matter at the seventh meeting ▪ Describing about general and specific objectives competence ▪ Explaining about the SPSS program to data prosesing 	Observing and taking notes	Computer, white board, reference book, and paper
PRESENTATION	<ul style="list-style-type: none"> ▪ Explaining about some of menu in SPSS ▪ Explaining about the entry data, edit and descriptive statistical ▪ Giving examples as a study case and solving together 	Observing, asking, taking notes	Computer, white board, reference book, and paper
CLOSING	<ul style="list-style-type: none"> ▪ Discussion ▪ Giving description about matter on the next meeting 	Discuss, asking, observing, taking notes	Computer, white board and paper

E. ASSESSMENT : Giving problems to the students.

F. REFERENCE :

1. Mustafid, 2003. *Statistika Elementer metode dan aplikasi dengan SPSS*. Jurusan Matematika FMIPA Undip, Semarang
2. Sembiring, R.K, Dr. 1986. *Ilmu Peluang dan Statistika untuk Insinyur dan Ilmuwan*. Penerbit ITB Bandung
3. Soejoeti, Zanzawi. 2003. *Materi Pokok Metode Statistik I*. Penerbit Karunika Jakarta Universitas Terbuka , Edisi ke satu
4. Triastuti Wuryandari, Msi dan Hasbi Yasin, S.Si, 2005. *Petunjuk Praktikum Metode Statistik I*. Lab. Statistik jurusan Matematika FMIPA Undip semarang

LEARNING UNIT PROGRAM

COURSE TITLE : STATISTICAL METHOD I
 CODE / CREDIT : PAS 101 / 3 CREDIT
 DURATION : 150 MINUTES
 WEEK : 9 and 10

A. INSTRUCTIONAL AIM :

1. GENERAL : After studying this course, the student are expected to be able to explain concepts something of modern statistika along with its because it is important the statistical model as base data analysis
2. SPECIFIC : After studying this course, the student can explain elementary concepts inferences statistic, hypothesis test and also estimation.

B. SUBJECT : Elementary concepts of inferences statistical

C. SUB SUBJECT : Point and interval estimation, hypothesis test for mean

D. TEACHING-LEARNING ACTIVITIES

STAGE	LECTURER ACTIVITIES	STUDENT ACTIVITIES	LEARNING MEDIA
INTRODUCTION	<ul style="list-style-type: none"> ▪ Describing about matter at the ninth and tenth meeting ▪ Describing about general and specific objectives competence ▪ Explaining about the elementary concept of inferences statistical 	Observing and taking notes	OHP, transparency, white board, reference book, and paper
PRESENTATION	<ul style="list-style-type: none"> ▪ Explaining about the point and interval estimation for mean and variance one sample and two sample and hypothesis test ▪ Giving examples as a study case and solving together 	Observing, asking, taking notes	OHP, transparency, white board, reference book, and paper
CLOSING	<ul style="list-style-type: none"> ▪ Discussion ▪ Giving description about matter on the next meeting 	Discuss, asking, observing, taking notes	white board and paper

E. ASSESSMENT : Giving problems to the students.

F. REFERENCE :

1. Mustafid, 2003. *Statistika Elementer metode dan aplikasi dengan SPSS*. Jurusan Matematika FMIPA Undip, Semarang
2. Sembiring, R.K, Dr. 1986. *Ilmu Peluang dan Statistika untuk Insinyur dan Ilmuwan*. Penerbit ITB Bandung
3. Soejoeti, Zanzawi. 2003. *Materi Pokok Metode Statistik I*. Penerbit Karunika Jakarta Universitas Terbuka , Edisi ke satu
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COURSE TITLE : STATISTICAL METHOD I

CODE / CREDIT : PAS 101 / 3 CREDIT

DURATION : 150 MINUTES

WEEK : 11 and 12

A. INSTRUCTIONAL AIM :

1. GENERAL : After studying this course, the student are expected to be able to explain concepts something of modern statistika along with its because it is important the statistical model as base data analysis
2. SPECIFIC : After studying this course, the student can goodness of fit some distribution with the Kolmogorov Smirnov test.

B. SUBJECT : The Kolmogorv Smirnov test

C. SUB SUBJECT : Goodness of fit on Poisson distribution and normal distribution

D. TEACHING-LEARNING ACTIVITIES

STAGE	LECTURER ACTIVITIES	STUDENT ACTIVITIES	LEARNING MEDIA
INTRODUCTION	<ul style="list-style-type: none">▪ Describing about matter at the eleventh meeting▪ Describing about general and specific objectives competence▪ Explaining about the kolmogorov smirnov▪	Observing and taking notes	OHP, transparency, white board, reference book, and paper
PRESENTATION	<ul style="list-style-type: none">▪ Explaining about the goodness of fit on poisson distribution and normal distribution▪ Giving examples as a study case and solving together	Observing, asking, taking notes	OHP, transparency, white board, reference book, and paper
CLOSING	<ul style="list-style-type: none">▪ Discussion▪ Giving description about matter on the next meeting	Discuss, asking, observing, taking notes	white board and paper

E. ASSESSMENT : Giving problems to the students.

F. REFERENCE :

1. Mustafid, 2003. *Statistika Elementer metode dan aplikasi dengan SPSS*. Jurusan Matematika FMIPA Undip, Semarang
2. Sembiring, R.K, Dr. 1986. *Ilmu Peluang dan Statistika untuk Insinyur dan Ilmuwan*. Penerbit ITB Bandung
3. Soejoeti, Zanzawi. 2003. *Materi Pokok Metode Statistik I*. Penerbit Karunika Jakarta Universitas Terbuka , Edisi ke satu
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LEARNING UNIT PROGRAM

COURSE TITLE : STATISTICAL METHOD I
CODE / CREDIT : PAS 101 / 3 CREDIT
DURATION : 150 MINUTES
WEEK : 13

A. INSTRUCTIONAL AIM :

1. GENERAL : After studying this course, the student are expected to be able to explain concepts something of modern statistika along with its because it is important the statistical model as base data analysis
2. SPECIFIC : After studying this course, the student can make simple linear regression model.

B. SUBJECT : Simple linear regression model.

C. SUB SUBJECT : Simple linear regression model and Correlation

D. TEACHING-LEARNING ACTIVITIES

STAGE	LECTURER ACTIVITIES	STUDENT ACTIVITIES	LEARNING MEDIA
INTRODUCTION	<ul style="list-style-type: none">▪ Describing about matter at the threetenth meeting▪ Describing about general and specific objectives competence▪ Explaining about the simple linear regression model	Observing and taking notes	OHP, transparency, white board, reference book, and paper
PRESENTATION	<ul style="list-style-type: none">▪ Explaining about the simple regression linear model and correlation▪ Giving examples as a study case and solving together	Observing, asking, taking notes	OHP, transparency, white board, reference book, and paper
CLOSING	<ul style="list-style-type: none">▪ Discussion▪ Giving description about matter on the next meeting	Discuss, asking, observing, taking notes	white board and paper

E. ASSESSMENT : Giving problems to the students.

F. REFERENCE :

1. Mustafid, 2003. *Statistika Elementer metode dan aplikasi dengan SPSS*. Jurusan Matematika FMIPA Undip, Semarang
2. Sembiring, R.K, Dr. 1986. *Ilmu Peluang dan Statistika untuk Insinyur dan Ilmuwan*. Penerbit ITB Bandung
3. Soejoeti, Zanzawi. 2003. *Materi Pokok Metode Statistik I*. Penerbit Karunika Jakarta Universitas Terbuka , Edisi ke satu
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LEARNING UNIT PROGRAM

COURSE TITLE : STATISTICAL METHOD I

CODE / CREDIT : PAS 101 / 3 CREDIT

DURATION : 150 MINUTES

WEEK : 14

A. INSTRUCTIONAL AIM :

1. GENERAL : After studying this course, the student are expected to be able to explain concepts something of modern statistika along with its because it is important the statistical model as base data analysis

2. SPECIFIC : After studying this course, the student can be analysis of variance to know equality some population mean.

B. SUBJECT : Analysis of variance

C. SUB SUBJECT : One way to analysis of variance

D. TEACHING-LEARNING ACTIVITIES

STAGE	LECTURER ACTIVITIES	STUDENT ACTIVITIES	LEARNING MEDIA
INTRODUCTION	<ul style="list-style-type: none">▪ Describing about matter at the fourteenth meeting▪ Describing about general and specific objectives competence▪ Explaining about the analysis of variance	Observing and taking notes	OHP, transparency, white board, reference book, and paper
PRESENTATION	<ul style="list-style-type: none">▪ Explaining about the one way to analysis of variance▪ Giving examples as a study case and solving together	Observing, asking, taking notes	OHP, transparency, white board, reference book, and paper
CLOSING	<ul style="list-style-type: none">▪ Discussion▪ Giving description about matter on the next meeting	Discuss, asking, observing, taking notes	white board and paper

E. ASSESSMENT : Giving problems to the students.

F. REFERENCE :

1. Mustafid, 2003. *Statistika Elementer metode dan aplikasi dengan SPSS*. Jurusan Matematika FMIPA Undip, Semarang
2. Sembiring, R.K, Dr. 1986. *Ilmu Peluang dan Statistika untuk Insinyur dan Ilmuwan*. Penerbit ITB Bandung
3. Soejoeti, Zanzawi. 2003. *Materi Pokok Metode Statistik I*. Penerbit Karunika Jakarta Universitas Terbuka , Edisi ke satu
4. Triastuti Wuryandari, Msi dan Hasbi Yasin, S.Si, 2005. *Petunjuk Praktikum Metode Statistik I*. Lab. Statistik jurusan Matematika FMIPA Undip semarang

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COURSE TITLE : STATISTICAL METHOD I

CODE / CREDIT : PAS 101 / 3 CREDIT

DURATION : 150 MINUTES

WEEK : 15

A. INSTRUCTIONAL AIM :

1. GENERAL : After studying this course, the student are expected to be able to explain concepts something of modern statistika along with its because it is important the statistical model as base data analysis

2. SPECIFIC : After studying this course, the student can process data with SPSS test mean test and variance.

B. SUBJECT : Mean test to one population, two population and more than 2 population.

C. SUB SUBJECT : Mean test and variance test to one population, two population and more than 2 population.

D. TEACHING-LEARNING ACTIVITIES

STAGE	LECTURER ACTIVITIES	STUDENT ACTIVITIES	LEARNING MEDIA
INTRODUCTION	<ul style="list-style-type: none"> ▪ Describing about matter at the fifteenth meeting ▪ Describing about general and specific objectives competence ▪ Explaining about the mean test to one population, two populations and more than 2 population 	Observing and taking notes	OHP, transparency, white board, reference book, and paper
PRESENTATION	<ul style="list-style-type: none"> ▪ Explaining about the mean and variance test to one population, two population and more than 2 populations ▪ Giving examples as a study case and solving together 	Observing, asking, taking notes	OHP, transparency, white board, reference book, and paper
CLOSING	<ul style="list-style-type: none"> ▪ Discussion ▪ Giving description about matter on the next meeting 	Discuss, asking, observing, taking notes	white board and paper

E. ASSESSMENT : Giving problems to the students.

F. REFERENCE :

1. Mustafid, 2003. *Statistika Elementer metode dan aplikasi dengan SPSS*. Jurusan Matematika FMIPA Undip, Semarang
2. Sembiring, R.K, Dr. 1986. *Ilmu Peluang dan Statistika untuk Insinyur dan Ilmuwan*. Penerbit ITB Bandung
3. Soejoeti, Zanzawi. 2003. *Materi Pokok Metode Statistik I*. Penerbit Karunika Jakarta Universitas Terbuka , Edisi ke satu
4. Triastuti Wuryandari, Msi dan Hasbi Yasin, S.Si, 2005. *Petunjuk Praktikum Metode Statistik I*. Lab. Statistik jurusan Matematika FMIPA Undip semarang

LEARNING PROGRAM OUTLINE

Course Title : STATISTICAL METHOD I

Code / Credit : PAS 101 / 3 credit

Course Description : Statistical Methods I represent to study about descriptive statistical and inferences statistical.

General Instructional Aim : After studying this course, the student are expected to be able to explain concepts something of modern statistika along with its because it is important the statistical model as base data analysis.

No.	Specific Instructional Aim	Subject	Sub Subject	Duration	References
1	After studying this course, the students are expected to have ability explaining meaning of statistical and also explain data, process scale and measurement	The meaning of statistical	<ul style="list-style-type: none"> ▪ Introduction ▪ The meaning of statistical ▪ Data process scale and measurement 	150 minutes	[1] 1-32 [3] 1.1-1.32
2	After studying this course, the students can summarize data result of attempt in graph and table also can calculated important value a group of data.	Descriptive statistical	<ul style="list-style-type: none"> ▪ Frequencies distribution ▪ Some properties of expected value and standart deviation 	150 minutes	[1] 14 – 36 [3] 2.1-2.44 [4] 5-6
3	After studying this course, the students can define probability and do calculated various probability	Probability elements	<ul style="list-style-type: none"> ▪ The sample space and even ▪ An even probability ▪ The conditional probability 	150 minutes	[1] 37-47 [3] 3.1-3.39 [4] 5 – 6
4	After studying this course, the student can explain result of quantitative attempt as random variable and its properties and also calculated the expected value	Random variable and their distributions	<ul style="list-style-type: none"> ▪ Random variable and their distribution ▪ Some properties of expected value and variance ▪ Some properties of two random variable 	150 minutes	[1] 37-47 [2] 34-79 [3] 4.1-4.41

5	After studying this course, the can explain some properties of probability distribution and also can chosen appropriate probability model	Special probability distribution	<ul style="list-style-type: none"> ▪ Binomial distribution ▪ Poisson distribution 	150 minutes	[1] 48-54 [2] 90-112 [3] 5.1-5.32
6	After studying this course, the students can explain normal distribution and can calculated probabilities as wide of normal curve	Normal distribution and random variable	<ul style="list-style-type: none"> ▪ Normal distribution ▪ Random sample 	150 minutes	[1] 55-63 [2] 120-138 [3] 6.1-6.47
7	After studying this course, the students can euse SSS Program as one of the data processing	Introduction to SPSS	<ul style="list-style-type: none"> ▪ Entry data ▪ Edut data ▪ Descreptive statistical 	150 minutes	[4] 1- 9
8	After studying this course, the students can explain elementary concepts inferences statistic, hypothesis test and also estimation	Elementary concept of inferences statistical	<ul style="list-style-type: none"> ▪ Point and interval estimatin ▪ Hypothesis test for mean 	300 minutes	[1] 62-78 [2] 203-278 [3] 7.1-7.35 8.1-8.26 9.1-9.40 [4] 9
9	After studying this course, students can goodness of fit some distribution with the Kolmogorov Smirnov test	The kolmogorov Smirnov test	<ul style="list-style-type: none"> ▪ Goodness of fit on Poisson distribution ▪ Goodness of fit on Normal distribution 	300 minutes	[1] 92-95 [2] 284-287 [4] 9
9	After studying this course, the students can to make simple linear regression model	Simple regression linear	<ul style="list-style-type: none"> ▪ Simple regression linear analysis ▪ Correlatin analysis 	150 minutes	1] 96-113 [2] 300-324 [4] 10-11
10	After studying this course, the students can explain analysis of variance to know equality some population mean	Analysis of variance	<ul style="list-style-type: none"> ▪ One way anova 	150 minutes	[1] 123-129 [2] 390-401 [4] 10

References

1. Mustafid, 2003. *Statistika Elementer metode dan aplikasi dengan SPSS*. Jurusan Matematika FMIPA Undip, Semarang
2. Sembiring, R.K, Dr. 1986. *Ilmu Peluang dan Statistika untuk Insinyur dan Ilmuwan*. Penerbit ITB Bandung
3. Soejoeti, Zanzawi. 2003. *Materi Pokok Metode Statistik I*. Penerbit Karunika Jakarta Universitas Terbuka , Edisi ke satu
4. Triastuti Wuryandari, Msi dan Hasbi Yasin, S.Si, 2005. *Petunjuk Praktikum Metode Statistik I*. Lab. Statistik jurusan Matematika FMIPA Undip semarang

LEARNING UNIT PROGRAM

COURSE TITLE : STATISTICAL METHOD I

CODE / CREDIT : PAS 101 / 3 CREDIT

DURATION : 150 MINUTES

WEEK : 13

A. INSTRUCTIONAL AIM :

1. GENERAL : After studying this course, the student are expected to be able to explain concepts something of modern statistika along with its because it is important the statistical model as base data analysis

2. SPECIFIC : After studying this course, the student can make simple linear regression model.

B. SUBJECT : Simple linear regression model.

C. SUB SUBJECT : Simple linear regression model and Correlation

D. TEACHING-LEARNING ACTIVITIES

STAGE	LECTURER ACTIVITIES	STUDENT ACTIVITIES	LEARNING MEDIA
INTRODUCTION	<ul style="list-style-type: none">▪ Describing about matter at the threetenth meeting▪ Describing about general and specific objectives competence▪ Explaining about the simple linear regression model	Observing and taking notes	OHP, transparency, white board, reference book, and paper
PRESENTATION	<ul style="list-style-type: none">▪ Explaining about the simple regression linear model and correlation▪ Giving examples as a study case and solving together	Observing, asking, taking notes	OHP, transparency, white board, reference book, and paper
CLOSING	<ul style="list-style-type: none">▪ Discussion▪ Giving description about matter on the next meeting	Discuss, asking, observing, taking notes	white board and paper