


RENCANA PEMBELAJARAN SEMESTER PASCA SARJANA TERAPAN S2 TEKNIK INFORMATIKA POLITEKNIK ELEKTRONIKA NEGERI SURABAYA				
Mata Kuliah	Statistics on Medical Science			
Bobot SKS	3			
Kelompok MK	MK Pilihan	Jam/minggu	3	
Tim Pengampu MK	Tessy Badriyah			NoId: RF-DTEL-PSTE-4.05.Rev.01[031]
Capaian Pembelajaran	- Mahasiswa memiliki dasar pemahaman yang baik untuk konsep ilmu Statistik yang digunakan untuk menganalisa Data Kesehatan dengan menggunakan tools SPSS			
Pokok Bahasan	<ol style="list-style-type: none"> 1. Memahami peran statistik untuk menganalisa data kesehatan 2. Memahami Statistik Deskriptif dan Visualisasi pendukungnya 3. Memahami teknik probabilitas, sampling dan distribusi data 4. Memahami konsep Pengujian Hipotesa dan persoalan Signifikansi 5. Memahami Konsep Korelasi dan Analysis of Differences 			
Referensi	<ol style="list-style-type: none"> 1. CAMPBELL, M. J.; MACHIN, D.; WALTERS, S. J. Medical Statistics: A Textbook for the Health Sciences. Wiley, 2010. ISBN 9780470976630. Disponibel em: < 2. DANCEY, C.; REIDY, J. Statistics Without Maths for Psychology: Using Spss for Windows. Prentice Hall International (UK) Ltd., 2008. 648 ISBN 9780132051606. 3. GORDON, R. A. Applied Statistics for the Social and Health Sciences. Routledge, 2012. ISBN 9780415875363. 4. SHOUKRI, M. M.; EDGE, V. L. Statistical methods for health sciences. CRC Press, 1996. ISBN 9780849376443. 5. VAN BELLE, G. et al. Biostatistics: A Methodology For the Health Sciences. Wiley, 2004. ISBN 9780471602354. 			
MK Prasyarat	-			
Media Pembelajaran	Software: OS Windows, SPSS Hardware: PC/Laptop, LCD Projector			
Mgg Ke-	Topik	Bahan Kajian (Materi Pembelajaran)		
(1)	Introduction to Statistics on Medical Sciences	<ul style="list-style-type: none"> - Variables and Research Designs - Between-participants and within-participants designs 		

(2)	Descriptive statistics	<ul style="list-style-type: none"> - Samples and populations - Measures of central tendency and Variation - Sampling error
(3)	Probability, sampling and distributions	<ul style="list-style-type: none"> - Probability and the Standard normal distribution - Confidence Intervals and the standard error
(4)	Hypothesis testing and statistical significance	<ul style="list-style-type: none"> - Applying probabilities to research: hypothesis testing - Statistical significance and p-value - Type I & Type II error - One-tailed and two-tailed hypotheses
(5)	Correlational analysis: Pearson's r	<ul style="list-style-type: none"> - Bivariate correlations - First- and second-order correlations - Patterns of correlations
(6)	Analyses of differences	<ul style="list-style-type: none"> - Analyses of differences between two conditions: the t-test - Analysis of two conditions
(7)	Issues of significance	
UJIAN TENGAH SEMESTER (UTS)		
(8)	Measures of association	<ul style="list-style-type: none"> - One-variable χ^2 - One-variable χ^2 – using frequencies different from those expected under the null hypothesis
(9)	Analysis of differences between three or more conditions	<ul style="list-style-type: none"> - Performing a one-way ANOVA - Instructions for repeated-measures
(10)	Analysis of variance with more than one	<ul style="list-style-type: none"> - Analysis of two between-participants factors - ANOVA with one between-participants factor and one within-participants factor - ANOVA with two within-participants factors
(11)	Regression analysis	<ul style="list-style-type: none"> - Drawing the line of best fit - Linear regression analysis
(12)	Analysis of three or more groups partialling out effects of a covariate	<ul style="list-style-type: none"> - Obtaining a chart of regression lines - Obtaining output for an ANCOV
(13)	Introduction to factor analysis	<ul style="list-style-type: none"> - Steps taken in performing a factor analysis - Loadings of variables on factors - The correlational matrix - Plotting the variables in factor space
(14)	Introduction to multivariate analysis of variance (MANOVA)	<ul style="list-style-type: none"> - Conducting MANOVA with one between-participants IV and two DVs - One within-participants IV and two DVs

	UJIAN AKHIR SEMESTER (UAS)
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