APPENDIX MODUL 5 : BIOSTATISTICS & COMPUTER STATISTICS

Module name	Biostatistics & Computer Statistics
Module level, if applicable	Basic Medical Education
Code, if applicable	20Y00510302
Subtitle, if applicable	-
Course, if applicable	Basic Medical Specialist Education
Semester(s) in which the module is taught	I
Person responsible for the module	Dr dr Burhanuddin Bahar, MS
Lecturer	1. Dr. dr. Burhanuddin Bahar, MS. 2. Dr dr Andi Alfian Zainuddin, MKM 3. dr. Gita Vita Soraya, PhD
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculm	This course is a compulsory course and must be passed by students before completing the first semester
Type of teaching, contact hours	Learning methods in this subject are : • Lecture (26,67 hours) • Structured Assignment (32 hours) • Private Study (32 hours) Contact hours for lecture is 90,67 hours
Workload	For this course, students are required to meet a minimum hours in one semester, which consist of: • Lecture (0,89 ECTS) • Structured Assignment(1,07 ECTS) • Private Study (1,07 ECS) Total ECTS: 3,02
Credit points	2 credit points (equivalent with 3,02 ECTS)
Requirements according to the examination Regulations	Students must have attended all classes and submitted all class assignments that are scheduled before final tests.
Recommended prerequisites	-
Module objective / intended learning outcomes	After completing this course, students are expected to: **Knowledge** **K1 :** To demonstrate theoretical concepts and skills individually and in the community, use medicine and surgery with integrity to prevent, diagnose, and treat conditions related to women's reproductive health

	Skill **S1 :** To develop by logic, critic, systematic, and creative thinking through scientific research or the creation of designs, formulate scientific conceptions and the results of their studies in the form of theses that are published in accredited scientific journals **Competence** **C1 :** To provide their knowledge in handling every obstetrics and gynaecology case with professional skills appropriate to their level of competence using an evidence-based medical approach (evidence-based medicine) with effective communication skills in the practise of interprofessional collaboration required to improve the quality of reproductive health services for women
Content	Students will learn about: 1. Basic concepts of statistics 2. Population and sample 3. Parametric and non-parametric statistics 4. Hypothesis test selection procedure 5. Descriptive Statistics 6. Comparative hypothesis test of numerical variables 7. Hypothesis testing of categorical variables 8. Correlative hypothesis 9. Multivariate analysis 10. Diagnostic test analysis 11. Systematic review and meta analysis
Forms of Assessment	• Written assignments : MCQ exam : 40% • Presentation : 60%
Study and examination requirements and form of examination	**Study and examination requirements:** • Students must attend 15 minutes before the class start, and 30 minutes before examination start • Students must switch off all electronic devices (for offline class) • Students must switch on the camera/video during the class (for online class) • Students must inform the lecturer if they will not attend the class due to sickness, etc. • Students must submit all class assignment before the deadline • Students must attend the exam to get final grade **For examination:** Multiple Choice Question using vignette and Presentation
Media Employed	Power Point Presentation
Reading List	**Compulsory:** 1. Dunn JO, Clark VA. (2009). Basic Statistics: a primer for the biomedical sciences (p. 1 - 34). 2. Yan F, Robert M, Li Y. (2017). Statistical methods and common problems in medical or biomedical science research (p. 1 - 7). 3. Dahlan MS (2011). Statistics for medicine and health: description, bivariate, and multivariate with applications using SPSS. Jakarta: Salemba Medika Publisher. 4. Tawfik GM, et al. A step-by-step guide for conducting a systematic review and meta-analysis with simulation data.

	Tropical Medicine and Health (2019) 47:46. **Additional:** 5. Munn Z, et al. What kind of systematic review should I conduct? A proposed typology and guidance for systematic reviewers in the medical and health sciences. BMC Medical Research Methodology (2018) 18:5 6. Mikolajewicz N, Komarova SV. Meta-Analytic Methodology for Basic Research: A Practical Guide. Front. Physiol., 27 March 2019. https://doi.org/10.3389/fphys.2019.00203 7. Textbooks / research articles / review articles from various journals provided by the instructor