Title of Module: **Research Methods**

Coordinator(s) / organiser(s):
Dr. Soenarnatalina Melaniani, Ir., M.Kes. (Module Leader)

**Teaching Faculty**

<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
<th>Qualifications*</th>
<th>Hours contributed</th>
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<tbody>
<tr>
<td>Dr.</td>
<td>Soenarnatalina Melaniani</td>
<td>Ir., M.Kes., Dr.</td>
<td>28.8</td>
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<tr>
<td>Dr.</td>
<td>Arief Wibowo</td>
<td>dr., M.S., Dr.</td>
<td>25.6</td>
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<tr>
<td>Dr.</td>
<td>Hari Basuki Notobroto</td>
<td>dr., M.Kes., Dr.</td>
<td>19.2</td>
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<tr>
<td>Dr.</td>
<td>Rachmah Indawati</td>
<td>S.KM., M.KM., Dr.</td>
<td>19.2</td>
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<tr>
<td>Dr.</td>
<td>Mahmudah</td>
<td>Ir., M.Kes., Dr.</td>
<td>19.2</td>
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<td>Dr.</td>
<td>Diah Indriani</td>
<td>S.Si., M.Si., Dr.</td>
<td>22.4</td>
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<tr>
<td>Dr.</td>
<td>Shrimarti Rukmini Devy</td>
<td>Dra., M.Kes., Dr.</td>
<td>12.8</td>
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<tr>
<td>Dr.</td>
<td>Oedojo Soedirham</td>
<td>dr., M.PH, M.A., Ph.D.</td>
<td>12.8</td>
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*PhD, Master, 20 years service(in practice) etc. Only provide details for faculty responsible for 25% or more of course load.

**Core / elective or optional:**

Core:
- Quantitative and Qualitative Research Methodology (PNM405)
- Application of Research Methodology (Integrating Experience see section 7)

Elective:
- Health Research Design (PNM406)
- Sampling Technique (PNM407)
- Critical Appraisal in Biostatistics and Demography (MAS409)

**Number of SKS credits allocated**: 12 SKS

**Student’s workload in hours**: 544

**Contact work hours***: 160

**Self-study work hours**: 384

* includes lectures, seminars, face-to-face, assessments

**Learning competences / objectives**

On successful completion of this module students will be able to:
1. Explain the design of observational research
2. Explain the principle of sampling technique
3. Explain the principle of sampling technique and estimate the required sample size
4. Explain the principle of experimental research

**Syllabus content. Brief overview of syllabus using bullet points.**
• Observational studies design with cross-sectional, case control and cohort techniques
• Experimental research design with quasi and true experimental design
• Sampling techniques for observational research including random (Simple Random Sampling, Systematic Random Sampling, Stratified Random Sampling, Cluster Random Sampling) and non-random (Purposive, Accidental, Snowball) techniques
• Estimating the sample size of several observational sampling techniques
• Estimating the replication size for experimental research
• Sampling technique for Rapid Survey research

Module level timetable - indicate the timing of the teaching sessions for the upcoming teaching year:
Quantitative and Qualitative Research Methodology: 5th semester
Health Research Design: 6th semester
Sampling Technique: 7th semester
Critical Appraisal in Biostatistics and Demography: 7th semester

Pedagogic/teaching methodology:
Scheduled learning includes lectures which delivering the content to the students with presenting technical assistance and ask student to make discussions about the actual real life cases which are given by lecturer.
During lecture in the classroom, the lecturer gives the didactic question to the students. It can make a chance for the student to ask the topic related questions immediately then they can get answers from the lecturer and the peer group.
Students in the class are divided into small groups. Each group will discuss about research methods and sampling techniques to help student to choose the most appropriate methods

Assessments used:
There are three types of assessment:
1. Middle examination (40%): Multiple choice questions 40% and Essays 60%
2. Final examination (40%): Multiple choice questions 40% and Essays 60%
3. Structured assignment (20%)
Each examination takes 100 minutes including essays and case studies. The examination assesses the students’ knowledge and understanding and all learning outcomes of the module. Structured assignment is given by lecturer in case studies method. The result of the case report is written in a paper.

Critical Appraisal in Biostatistics and Demography:
There are a type of assessment:
1. Structured assignment (100%)
The students are divided into small groups and discuss a case study which is given by lecturer. The results of the discussions are written in a paper.

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<th>Weeks required in academic calendar:</th>
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<th>Week number</th>
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<td>Course</td>
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<td>Quantitative and Qualitative Research     Methodology</td>
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