

Title of Module:

**Research Methods**

Coordinator(s) / organiser(s):

Dr. Soenarnatalina Melaniani, Ir., M.Kes. (Module Leader)

Teaching Faculty

Title	Name	Qualifications*	Hours contributed
Dr.	Soenarnatalina Melaniani	Ir., M.Kes., Dr.	28.8
Dr.	Arief Wibowo	dr., M.S., Dr.	25.6
Dr.	Hari Basuki Notobroto	dr., M.Kes., Dr.	19.2
Dr.	Rachmah Indawati	S.KM., M.KM., Dr.	19.2
Dr.	Mahmudah	Ir., M.Kes., Dr.	19.2
Dr.	Diah Indriani	S.Si., M.Si., Dr.	22.4
Dr.	Shrimarti Rukmini Devy	Dra., M.Kes., Dr.	12.8
Dr.	Oedojo Soedirham	dr., M.PH, M.A., Ph.D.	12.8

\* 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	Student's workload in hours	Contact work hours*	Self-study work hours
12 SKS	544	160	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.

<ul style="list-style-type: none"> <li>• Observational studies design with cross-sectional, case control and cohort techniques</li> <li>• Experimental research design with quasi and true experimental design</li> <li>• 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</li> <li>• Estimating the sample size of several observational sampling techniques</li> <li>• Estimating the replication size for experimental research</li> <li>• Sampling technique for Rapid Survey research</li> </ul>
<p>Module level timetable - indicate the timing of the teaching sessions for the upcoming teaching year:</p> <p>Quantitative and Qualitative Research Methodology: 5<sup>th</sup> semester</p> <p>Health Research Design: 6<sup>th</sup> semester</p> <p>Sampling Technique: 7<sup>th</sup> semester</p> <p>Critical Appraisal in Biostatistics and Demography: 7<sup>th</sup> semester</p>

**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.

Weeks required and place in academic calendar:	Number of weeks	Week number
	16	01-16

Quantitative and Qualitative Research Methodology Weeks beginning, 08/2019-11/2019	16	01-16
Health Research Design Weeks beginning, 02/2020-05/2020	16	01-16
Sampling Technique Weeks beginning, 08/2020-11/2020	16	01-16
Critical Appraisal in Biostatistics and Demography Weeks beginning, 08/2020-11/2020		