Title of Module:
**Diseases Epidemiology**

Coordinator(s) / organiser(s):
Kurnia Dwi Artanti, dr., M.Sc. (Module Leader)

### Teaching Faculty

<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
<th>Qualifications*</th>
<th>Hours contributed</th>
</tr>
</thead>
<tbody>
<tr>
<td>dr.</td>
<td>Kurnia Dwi Artanti</td>
<td>dr., M.Sc.</td>
<td>38.4</td>
</tr>
<tr>
<td>Professor</td>
<td>Chatarina Umbul Wahjuni</td>
<td>dr., M.S., M.PH., Dr.</td>
<td>24</td>
</tr>
<tr>
<td>Dr.</td>
<td>Muhammad Atoillah Isfandiari</td>
<td>dr., M.Kes., Dr.</td>
<td>33.6</td>
</tr>
<tr>
<td>Dr.</td>
<td>Santi Martini</td>
<td>dr., M.Kes., Dr.</td>
<td>33.6</td>
</tr>
<tr>
<td>Dr.</td>
<td>Atik Choirul Hidajah</td>
<td>dr., M.Kes., Dr.</td>
<td>24</td>
</tr>
<tr>
<td>drg.</td>
<td>Arief Hargono</td>
<td>drg., M.Kes.</td>
<td>24</td>
</tr>
<tr>
<td>dr.</td>
<td>Prijono Satyabakti</td>
<td>dr., M.S., MPH.</td>
<td>33.6</td>
</tr>
<tr>
<td>Ms.</td>
<td>Lucia Yovita Hendrati</td>
<td>S.KM., M.Kes.</td>
<td>28.8</td>
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</table>

*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:**
- Epidemiology of Communicable Disease (KME302)
- Epidemiology of Non Communicable Disease (KME303)

**Elective:**
- Epidemiology of Tropical Disease (KME407)
- Epidemiology of Accident (KME420)
- Epidemiology of Cancer (KME403)
- Management and Prevention of Cardiovascular Disease and Stroke (KME426)
- Epidemiology of Vaccine Preventable Disease (KME301)

### Number of SKS credits allocated

<table>
<thead>
<tr>
<th>Number of SKS credits allocated</th>
<th>Student’s workload in hours</th>
<th>Contact work hours*</th>
<th>Self-study work hours</th>
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<tbody>
<tr>
<td>18 SKS</td>
<td>816</td>
<td>240</td>
<td>576</td>
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</tbody>
</table>

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

### Learning competences / objectives

On successful completion of this module students will be able to:

1. Define the epidemiology approach for tropical disease prevention
2. Design and assess measures for prevention and management of cardiovascular disease and stroke
3. Apply the public health insight include behavioral and social, chronic disease, infectious, and injury science
Syllabus content. Brief overview of syllabus using bullet points.

Epidemiology of Communicable Disease:
- Epidemiology approach for preventing respiratory infection, diarrhea, typhoid fever, leprosy disease, tuberculosis disease, hepatitis, dengue hemorrhagic fever, malaria disease, avian influenza, \textit{MERS-CoV}, HIV / AIDS infection
- Policy and strategy for preventing contagious disease
- Epidemiology for preventing sexual transmission disease

Epidemiology of Non Communicable Disease:
- Epidemiology approach for preventing non-communicable disease
- Epidemiology of cataract and asthma, chronic renal, cancer, cardiovascular, diabetics, dentistry disease, rheumatoid arthritis and its prevention

Epidemiology of Tropical Disease:
- The epidemiology approach for tropical disease prevention
- The epidemiology approach caused by fleas dan mites, protozoa, fungus, helminth parasite, leptospira
- The morphology of egg helminth and helminth
- Tropical disease infected by vectors, a mosquito, yaws
- Identification types of Plasmodium

Epidemiology of Accident:
- Interpretation and scope of injury epidemiology
- Concept of causation accident and accident prevention
- Pattern, and frequency of accident
- Injury surveillance
- Assessment of the risk factor of accident epidemiology practicum
- Observational and cross-sectional accident research
- Experimental accident research

Epidemiology of Cancer:
- The concept of cancer epidemiology
- Neoplasia
- Carcinogen toxicology
- Descriptive epidemiology of lung, nasopharyngeal, mammae, hepatocellular, cervix, and colorectal cancer, and leukemia
- Design method of cancer study
- Critical appraisal of cancer study that published in national and international journal

Management and Prevention of Cardiovascular Disease and Stroke:
- Risk factor of cardiovascular disease and stroke
- Measures for cardiovascular disease and stroke prevention
- Direct & indirect cost and burden of disease
- Physical activity and rehabilitation
- Nutrition and food security
- Health promotion
• Role of stakeholders
Epidemiology of Vaccine Preventable Disease:
• Concept of Immunology
• Vaccine program in Indonesia
• Epidemiology of diphtheria, tetanus, and pertussis
• Epidemiology of hepatitis type B, poliomyelitis, and measles
• Agent related to topic epidemiology of Vaccine Preventable Disease
• Program management and evaluation of national vaccine
• Vaccine for traveling: Yellow fever and meningococcus epidemiology
• Recommended vaccine: Haemophilus influenza type B, pneumococcus, and influenza epidemiology
• Rotavirus and typhoid epidemiology
• Define MMR (Mumps, Measles, Rubella) and Hepatitis type A epidemiology
• Varicella dan Human Papilloma Virus (HPV) Epidemiology

Module level timetable - indicate the timing of the teaching sessions from the current and upcoming teaching year:
Epidemiology of Communicable Disease: 09.00 – 11.00 a.m., Wednesday, 3rd semester
Epidemiology of Non Communicable Disease: 4th semester
Epidemiology of Tropical Disease: 6th semester
Epidemiology of Accident: 6th semester
Epidemiology of Cancer: 6th semester
Management and Prevention of Cardiovascular Disease and Stroke: 6th semester
Epidemiology of Vaccine Preventable Disease: 7th semester

Pedagogic/teaching methodology:
In this module, Scheduled learning includes lectures and discussions. The students are divided into small groups and each gets the different topic for discussion. Then, they have to present their result in the seminar. This module is held at laboratory, class, and around of campus.

Assessments used:
Epidemiology of Communicable Disease and Epidemiology of Non Communicable Disease:
There are three types of examination:
1. Middle examination (40%)
2. Final examination (50%)
3. Structured assignment (10%)
Each examination takes 100 minutes includes multiple choice questions, essays, and short answer questions. The examination assesses the students' knowledge and understanding and all learning outcomes of the module. Structured assignment is given by writing a paper then the students present it.

Epidemiology of Cancer:
There are three types of assessment:
1. Middle examination (35%)
2. Final examination (35%)
3. Presentation critical appraisal (30%)
Each examination takes 100 minutes includes multiple choice questions, essays, and short answer questions. The examination assesses the students’ knowledge and understanding and all learning outcomes of the module. Structured assignment is given by writing a paper then the students present it.

Management and Prevention of Cardiovascular Disease and Stroke:
There are three types of assessment:
1. Middle examination (30%)
2. Final examination (30%)
3. Structured Assignment (40%)
Each examination takes 100 minutes includes multiple choice questions, essays, and short answer questions. The examination assesses the students’ knowledge and understanding and all learning outcomes of the module. Structured assignment is given by writing a paper then the students present it.

Epidemiology of Tropical Disease, Epidemiology of Accident, and Epidemiology of Vaccine Preventable Disease:
There are four types of assessment:
1. Middle examination (35 %)
2. Final examination (35%)
3. Practicum (15 %)
4. Field report (15%)
Each examination takes 100 minutes including multiple choice questions, essays, and short answer questions, it depends to the lecturer. The examination assesses the students' knowledge and understanding and all learning outcomes of the module. The lecturer will assess the students’ performance during practicum. Topic of the field study is given by lecturer and the students must write a field report.

<table>
<thead>
<tr>
<th>Weeks required and place in academic calendar:</th>
<th>Number of weeks</th>
<th>Week number</th>
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<tbody>
<tr>
<td>Epidemiology of Communicable Disease</td>
<td>16</td>
<td>1 – 16</td>
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<tr>
<td>Wednesday, 09.00 – 11.00 a.m.</td>
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<td>Weeks beginning 15/08/2018-28/11/2018</td>
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<tr>
<td>Epidemiology of Non Communicable Disease</td>
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<td>17 – 32</td>
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<td>Weeks beginning 02/2019 -05/2019</td>
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<tr>
<td>Epidemiology of Tropical Disease</td>
<td>16</td>
<td>17 – 32</td>
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<td>Weeks beginning 02/2020 -05/2020</td>
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<tr>
<td>Weeks beginning 02/2020 -05/2020</td>
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<tr>
<td>Topic</td>
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<td>Period</td>
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<tr>
<td>Epidemiology of Cancer</td>
<td>16</td>
<td>17 – 32</td>
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<tr>
<td>Management and Prevention of Cardiovascular</td>
<td>16</td>
<td>17 – 32</td>
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<tr>
<td>Disease and Stroke</td>
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<td>Weeks beginning 02/2020 - 05/2020</td>
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<tr>
<td>Epidemiology of Vaccine Preventable Disease</td>
<td>16</td>
<td>1 – 16</td>
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<td>Weeks beginning 08/2020 - 11/2020</td>
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