

Title of Module:

Biomedics

Coordinator(s) / organiser(s):

Prof. Dr. Tri Martiana, dr., M.S. (Module Leader)

Teaching Faculty

Title	Name	Qualifications*	Hours contributed
Professor	Tri Martiana	dr., M.S., Dr.	12.5
Professor	Soedjajadi Keman	dr., M.S., Ph.D.	10
Professor	Ririh Yudhastuti	drh., M.Sc., Dr.	7.5
Dr.	Santi Martini	dr., M.Kes., Dr.	10
Dr.	Atik Choirul Hidajah	dr., M.Kes., Dr.	10
Dr.	Muhammad Atoillah Isfandiari	dr., M.Kes., Dr.	5
dr.	Prijono Satyabakti	M.S., M.PH.	5
dr.	Sho'im Hidayat	dr., M.S.	10
dr.	Farapti	dr., M.Gizi	10

* 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:

Biomedics I (BIF113)

Biomedics II (BIF114)

Number of SKS credits allocated	Student's workload in hours	Contact work hours*	Self-study work hours
6 SKS	272	80	192

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

Learning competences / objectives

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

Biomedics I:

1. Understand the human body system
2. Define about cell biology

Biomedics II:

1. Define about bacteria, parasites, and viruses
2. Understand mechanism of pathogenic microorganisms in the body

Syllabus content. Brief overview of syllabus using bullet points.

Biomedics I:

- Concept of the human body system and biology cell
- Musculoskeletal system
- Skin system and accessories
- Cardiovascular system
- Respiratory system
- Blood and lymphatic systems
- Digestive system
- Urinary system
- Hearing and vision system
- Reproduction system
- Endocrine system
- Immune system

Biomedics II:

- Definition of bacteria, parasites, viruses and the mechanisms of pathogenic microorganism in the body
- Mycobacterium tuberculosis and leprae
- Intestinal protozoa and role of arthropods in disease transmission
- Escherichia Coli bacterium and Salmonella thypii
- Corynebacterium diphteriae
- Yersinia pestis and Leptospira sp.
- Rabies
- Bacillus anthrax and Coccus bacterium
- Measles and polio
- Plasmodium sp. and Toxoplasma gondii
- Helminths
- Human Immunodeficiency Virus (HIV) and hepatitis

Module level timetable - indicate the timing of the teaching sessions from the previous teaching year:

Biomedics I: 03.00-05.00 p.m., Wednesday, 1st semester

Biomedics II: 01.00-03.00 p.m., Monday, 2nd semester

Pedagogic/teaching methodology:

Scheduled learning includes lecturers, discussion, and seminars in groups.

Lecturer presents the teaching materials with LCD and whiteboard. The students are divided into small groups. Each group has to discuss the topic determined by the lecturer and present the results to the class.

Independent learning includes hours engaged with essential reading, assignment preparation and completion and self-directed study. Students are provided with access to essential and supplementary learning via email or e-learning (AULA) and whiteboard.

Assessments used:

There are three types of examination:

1. Middle examination (40%)
2. Final examination (50%)
3. Structured assignment (10%)

Each examination takes 100 minutes includes essays. 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.

Weeks required and place in academic calendar:	Number of weeks	Week number
Biomedics I Wednesday, 03.00-05.00 p.m., Weeks beginning 16/08/2017-29/11/2017	16	01-16
Biomedics II Monday, 01.00-03.00 p.m., Weeks beginning 12/02/2018-28/05/2018	16	17-32