Module designation	Environmental Physiology of Tropical Animals
Semester(s) in which the module is taught	Odd Semester
Person responsible for the module	Prof. Ir. Diah Tri Widayati, S.Pt., MP., Ph.D., IPM. Prof. Ir. Ismaya, M.Sc., Ph.D. Dr. Ir. Sigit Bintara, M.Si., IPU., ASEAN Eng.
Language	Bahasa and English
Relation to curriculum	Specialization's elective
Teaching methods	Classical lecture and discussion
Workload (incl. contact hours, self-study hours)	Total workload: 79 hours Contact hours: - Lecture: 23 hours - Academic activity: 28 hours Private study: 28 hours
Credit points	2/0
Required and recommended prerequisites for joining the module	None
Module objectives/intended learning outcomes	Course Outcomes (CO): 1. Able to explain the definition of animal environment science in the animal husbandry process. 2. Students are able to arrange the animal environment for reaching the optimum animal productivity. 3. Students are able to explain the adaptation process with various species. 4. Students are able to explain the adaptation process in various animal species. Expected Learning Outcomes: - Attitudes and Behaviors: 1. Showing the social sensitivity and attention to the community and environment by respecting the culture diversity, view, religious, beliefs, and other people's opinion, and also obey the rules. (CO1, CO2, CO3, CO4) - Mastery in Science: 1. Able to master the current animal science and its application theory (CO1, CO2, CO3) 2. Able to master the livestock production science, animal nutrition and fed science, animal products technology, and the livestock social economics in relation to food security and environment. (CO1, CO2, CO3, CO4) - Special skills: 1. Able to make innovation in the animal husbandry based on the development of science and technology. (CO3, CO4) 2. Able to design interdisciplinary and multidisciplinary research in the animal husbandry. (CO2) - General skills: 1. Able to develop logical, critical, systematic, and creative thought through scientific research, creation of design in the science and technology, which pays attention and applies humanity values according to their expertise. The graduates are able to arrange scientific concept and the study result

<table>
<tr><td></td><td colspan="4">based on the principles, procedures, and scientific ethics. (CO3)
2. Able to identify the science that becomes their research object and position it to a research map by using information technology in the context of science development and expertise implementation developed through interdisciplinary or multidisciplinary approaches. (CO1, CO2, CO4)</td></tr>
<tr><td>Content</td><td colspan="4">The course of advanced environmental physiology of tropical animals learns on environment factors i.e physical environment, chemistry environment, biological and social environment which can influence the homeostasis, faali status, productivity, reproductivity in tropical area and non-tropical area and also the dangerous pollutant and toxic that are existed in the environment</td></tr>
<tr><td rowspan="10">Exams and assessment formats</td><td>Assessment Components</td><td colspan="2">Course Outcomes (CO)</td><td>Percentage (%)</td></tr>
<tr><td>1. Midterm exam (written test, take home exam, paper assignment)</td><td colspan="2">CO1, CO2 & CO3</td><td>40</td></tr>
<tr><td>2. Final exam (written test, take home exam, paper assignment)</td><td colspan="2">CO1, CO2 & CO3</td><td>40</td></tr>
<tr><td>3. Presentation</td><td colspan="2">CO1 & CO2</td><td>5</td></tr>
<tr><td>4. Quizzes</td><td colspan="2">CO1</td><td>5</td></tr>
<tr><td>5. Take-home written assignments (paper)</td><td colspan="2">CO1</td><td>10</td></tr>
<tr><td colspan="4">Grade and Score</td></tr>
<tr><td>Grade</td><td>Score</td><td>Grade</td><td>Score</td></tr>
<tr><td>A</td><td>≥80</td><td>C+</td><td>45-49,9</td></tr>
<tr><td>A-</td><td>75-79,9</td><td>C</td><td>40-44,9</td></tr>
<tr><td>A/B</td><td>70-74,9</td><td>C-</td><td>35-39,9</td></tr>
<tr><td>B+</td><td>65-69,9</td><td>C/D</td><td>30-34,9</td></tr>
<tr><td>B</td><td>60-64,9</td><td>D+</td><td>25-29,9</td></tr>
<tr><td>B-</td><td>55-59,9</td><td>D</td><td>20-24,9</td></tr>
<tr><td>B/C</td><td>50-54,9</td><td>E</td><td>0-19,9</td></tr>
<tr><td>Study and examination requirements</td><td colspan="4">The final grade in the module is composed of 40% performance on Midterm exam, 40% final exam, 5% presentation, 5% quiz, 10% paper. Students must have a final grade of 70% or higher to pass</td></tr>
<tr><td>Reading list</td><td colspan="4">- Hafez, E.S.E. 1994. Adaptation of Domestic Animals.
- Buck, W.B. 1990. Environmental Toxicology and Pollutants.
- Suratmo, F.G. 1995. Analisis Mengenai Dampak Lingkungan.
- Suhardi. 1991. Petunjuk Laboratorium Analisa Air dan Penanganan Limbah.</td></tr>
</table>