Module Handbook

Modul Name	Endocrinology
Module level	Bachelor/Graduate
Abbreviation, if applicable	BIO
Sub-heading, if applicable	
Courses included in the module, if applicable	
Semester/Term:	5th/Third year
Module coordinator	Dra. Nur Kuswanti, M.Sc.St
Lecturer(s)	Dr. Raharjo, M.Si Dra. Nur Kuswanti, M.Sc.St Nur Qomariyah, S.Pd., M.Sc Erlix Rakhmad Purnama, S.Si., M.Si Firas Khaleyla, S.Si., M.Si
Language	Indonesian (Bahasa Indonesia)
Classification within the curriculum	~~Compulsory Course~~/Elective studies
Teaching format/class per week during semester	2 hours lectures (50 min/hour), 4 hours individual study and tutorial, 15 weeks per semester, and total 85 hours a semester
Workload	2
Requirements	Animal Physiology, Animal Structure and Development
Learning goals/Competencies	**General Competence (knowledge):** 1. Have knowledge and insight about the concept of endocrinology which includes: cellular mechanism of action of hormones, physiological effects of metabolic hormones and developmental hormones, as well as the action of hormones in invertebrate animals 2. Able to make decisions and design activities to solve health problems using an endocrinology approach 1. Memiliki pengetahuan dan wawasan tentang konsep endokrinologi yang mencakup: mekanisme seluler kerja hormon, efek fisiologis hormon metabolik dan hormon perkembangan, serta kerja hormon pada hewan Invertebrata 2. Mampu membuat keputusan dan merancang aktivitas untuk menyelesaikan masalah-masalah kesehatan menggunakan pendekatan endokrinologi **Skills competence** 1. Able to utilize technology, information, and communication to apply endocrinology concepts in various fields of life. 2. Appreciate the role of endocrinology in various fields of health.

	3. Have responsible attitude by applying endocrinology concepts and principles in daily life. 1. Mampu memanfaatkan teknologi, informasi, dan komunikasi untuk menerapkan konsep endokrinologi diberbagai bidang kehidupan. 2. Mengapresiasi peran endokrinologi diberbagai bidang kesehatan. 3. Memiliki sikap bertanggung jawab dengan menerapkan konsep-konsep dan prinsip-prinsip endokrinologi dalam keseharian. **Specific Competence:** 1. Memahami perkembangan endokrinologi 2. Memahami sistem endokrin vertebrata 3. Memahani Mekanisme Umum kerja hormon 4. Memahami macam serta cara kerja hormon hipotalamus dan pituitari 5. Memahami macam serta cara kerja hormon hipotalamus dan pituitari 6. Memahami macam serta cara kerja hormon Neurohipofisis 7. Memahami macam serta cara kerja hormon kelenjar Tiroid 8. Memahami macam serta cara kerja hormon kelenjar paratiroid dan hormone metabolisme kalsium 9. Memahami macam serta cara kerja hormon Kelenjar Pankreas 10. Memahami macam serta cara kerja hormon Kelenjar Adrenal 11. Memahami macam serta cara kerja Hormon Gastrointestinal 12. Memahami macam serta cara kerja Hormon Reproduksi Betina 13. Memahami macam serta cara kerja Hormon Kehamilan+Laktasi 14. Memahami macam serta cara kerja Hormon Reproduksi Jantan 15. Memahami macam serta cara kerja Hormon pada invertebrata
Contents	Studies on hormones in animals and humans include: definition of hormones and glandular characteristics, hormone ingredients; action of peptide hormones and steroids; anatomical relationship between the pituitary-hypothalamus; glandular structure, chemicals and hypothalamic-pituitary hormone function, nerohipofisis, thyroid, parathyroid, calcitonin, adrenal, and pancreas, and gastrointestinal; relationship between structure and function of male and female reproductive organs and hormonal control; hormones in pregnancy and lactation and hormones in

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<tr><td></td><td>invertebrate.</td></tr>
<tr><td>Attribut of soft skill</td><td>Thinking and communication skills</td></tr>
<tr><td>Study/Exam achievement</td><td>Students are considered to be mastery or competent and pass of this course if at least students are reached Final score (NA)= 68 in 0-100 score or B or 2 in 0-4 score.
Final score calculated by formula:
NA = (2xP)+(3xT)+(2xUSS)+(3xUS)
10
Conversion scale 0-100 to scale 0-and the letter symbol as follow in Table:
<table>
<tr><th>Letter</th><th>Number</th><th>Interval</th></tr>
<tr><td>A</td><td>4,00</td><td>85 ≤ A < 100</td></tr>
<tr><td>A-</td><td>3,75</td><td>80 ≤ A- < 85</td></tr>
<tr><td>B+</td><td>3,50</td><td>75 ≤ B+ < 80</td></tr>
<tr><td>B</td><td>3,00</td><td>70 ≤ B < 75</td></tr>
<tr><td>B-</td><td>2,75</td><td>65 ≤ B- < 70</td></tr>
<tr><td>C+</td><td>2,50</td><td>60 ≤ C+ < 65</td></tr>
<tr><td>C</td><td>2,00</td><td>55 ≤ C < 60</td></tr>
<tr><td>D</td><td>1,00</td><td>40 ≤ D < 55</td></tr>
<tr><td>E</td><td>0,00</td><td>0 ≤ E < 40</td></tr>
</table></td></tr>
<tr><td>Form of Media</td><td>Slide and LCD projector, Video, slide with animation,</td></tr>
<tr><td>Learning methods</td><td>Lecture, group and class discussion, assignment, peer tutorial (reciprocal teaching)</td></tr>
<tr><td>Literature (Referenceis)</td><td>1. Hadley, M. E. (1996). Endocrinology Prentice-Hall. New Jersey.
2. Jameson, J. (2013). Harrison's Endocrinology, 3E. McGraw-Hill Education.
3. Turner, C. D., & Bagnara, J. T. (1971). General endocrinology, W. B. B. Saunders.</td></tr>
<tr><td>Notes:</td><td>Total ECTS =</td></tr>
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