Modul Description

Module name	Course Module of Differentiated Assessment in Biology learning
Module level, if applicable	Magister of Biology Education
Code, if applicable	1312800001
Subtitle, if applicable	-
Course, if applicable	Differentiated Assessment in Biology learning
Semester(s) in which the module istaught	2nd
Person responsible for the module	Lecturer of Courses
Lecturer	Dr. Hanum Isfaeni, M.Si, Dr.
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is a mandatory course for Magister of Biology Education and offered in the 1st semester.
Type of teaching, contact hours	Teaching methods used in this course are: - Lecture (i.e., group investigation, small group discussion, case study, and video-based learning) - Structured assignments (i.e., essays and case study The class size for lecture is 30 students. Contact hours for lecture is 64 hours, assignments are 64 hours
Workload	For this course, students required to meet a minimum of 155.6 hours in one semester, which consist of: 19.6 hours for lecture : tutorial and discuss the subject 12.00 hours for structured assignments : doing exercices and problem solving or project, 70.00 hours for independent study : reading references, group discuss, finish the exercises. 34 hours for Project 14 hours for Paper 1 ECTS = 30 hours 155.6 hours = 5.2 ECTS -
Credit points	2 credit points (equivalent with 5,2 ECTS)

Requirements according to the examination regulations	Students must have attended all classes and submitted all class assignments that are scheduled before the final tests.
Recommended prerequisites	Students must have attended all classes and submitted all class assignments that are scheduled before the final tests.
Module objectives/intended learning outcomes	After completing the course and given with this case: **Learning Outcomes** **Social Competences:** 1. Have integrity and professional ethics, self-development, and make innovations to improve the quality of education and lifelong learning for the community (PLO1) 2. Able to apply analytical, critical, innovative, and abstraction thinking skills in the field of biology education (PLO2) **Specific Competences:** 1. Able to design and manage classical, laboratory, natural and digital/virtual-based biology learning in education units (PLO5) 2. Able to design and conduct evaluations and assessments of learning in educational units (PLO8).

Content	**Students will learn about:** The ontological, epistemological and axiological foundations in Biology Education, basic concepts of philosophy of science, philosophy of science and human beings, and their differences from other branches of science..
Forms of Assessment	Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Structured tasks: 20%; Project: 20%, Mid Test: 30%; Final Test: 30%
Study and examination requirements and forms of examination	**Study and examination requirements:** - Students must attend 15 minutes before the class starts. - Students must switch off all electronic devices. - Students must inform the lecturer if they will not attend the class due to sickness, etc. - Students must submit all class assignments before the deadline. - Students must attend the exam to get final grade. **Form of examination:** Written exam: Essay
Media employed	Direct Whiteboard, Power Point Presentation, online conference platform

Reading List	1. Birenbaum, M., Deluca, C., Earl, L., Looney, A., Smith, K., Timperley, H., Volante, L., & Wyatt-smith, C. (2015). International trends in the implementation of assessment for learning: Implications for policy and practice. *Policy Future in Education*, *13*(1), 117– 2. Bostes. (n.d.). Diffrentiated assessment. Retrieved from http://syllabus.bos.nsw.edu.au/support-materials/differentiated-assessment/ 3. Burrus, Z. & Messer, D. (n.d.). Differentiation and assessment. 4. Botturi, L. (2003). Instructional Design & Learning Technology Standard. ICeF - Quaderni dell'Istituto, 9. 5. Heacox, D. (2002). Differentiating Instruction in the Regular Classroom. Minneapolis: Free Spirit Publishing. 6. Cumming, J., & W, S. C. (2009). *Educational Assessment in the 21st Century Connecting Theory and Practice.* London: Springer Dordrecht Heidelberg. doi:10.1007/978-1-4020-9964-9 7. Dodge, J. (2009). 25 Quick formative assessments for a differentiated classroom. 8. Peng, H., Ma, S. & Spector, J.M. Personalized adaptive learning: an emerging pedagogical approach enabled by a smart learning environment. *Smart Learn. Environ.* **6**, 9 (2019). https://doi.org/10.1186/s40561-019-0089 9. Kinzie, C.L. & Markovchick, K (n.d.). Comparing traditional and differentiated classrooms. 10. Strietholt, R., Rosén, M., & Gladushyna, O. (2021). The integrity of educational outcome measures in international assessments. *Educational Assessment, Evaluation and Accountability*, *33*(1) 11.