Module Descriptions

Module designation	*Pengembangan Instrumen* (Instrument Development)
Course Code	8420502269
Semester/Term	7th semester
Person responsible for the module	Prof. Dr. Endang Susantini, M.Pd. Dr. Ulfi Faizah, S.Pd., M.Si. Dr. Muji Sri Prastiwi, S.Pd., M.Pd
Language	Bahasa Indonesia
Relation to curriculum	Elective course
Teaching methods	Lecture
Workload	Contact hours: 2 x50 minutes lectures, 2 x50 minutes laboratory works Private study: 2 x60 minutes structured activity, 2 x60 minutes individual activity Total 90 hours per semester ~ 3.18 ECTS**
Credit Point	2 CUs
Required and recommended prerequisites for joining the module	Learning theory
Module Objectives/intended learning outcomes	1. Explain the basic concepts of biology education research instruments, including test and non-test instruments, validity, reliability, and item analysis. 2. Design and develop biology learning instruments (cognitive and non-cognitive tests) using ICT to support learning evaluation. 3. Test the validity, reliability, and characteristics of instrument items through systematic and critical analysis of trial data. 4. Students can develop research instruments in accordance with the research objectives.
Content	The Instrument Development course equips students with the knowledge and skills to design, develop, and evaluate educational research instruments. The course covers an introduction to instruments, test and non-test instruments, validity, reliability, and item analysis. Students also practice developing cognitive and non-cognitive tests through a Project-Based Learning (PjBL) approach, from drafting the questionnaire, testing, to revising the instrument.

	The final result is a valid, reliable instrument product that is ready for use in research and learning.
Examination forms	Project-based
Requirements for successfully passing the module	**Study Requirement** Attendance: students must attend at least 75% of the lectures to be eligible for the final project. **Study examination** The final grade (*NA*) is calculated based on the following ratio: Grade conversion table and assessment components below

Requirements for successfully passing the module

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Study examination

The final grade (*NA*) is calculated based on the following ratio:

Assessment Components	Percentage of contribution
Participation	20%
Assignment	30%
Mid-semester test	20%
Project-based	30%

Grade conversion of 0-100 scale into 0-4 scale is set as below:

Letter	Number	Grade Interval
A	4,00	$85 \leq A \leq 100$
A-	3,75	$80 \leq A\text{-} < 85$
B+	3,50	$75 \leq B+ < 80$
B	3,00	$70 \leq B < 75$
B-	2,75	$65 \leq B\text{-} < 70$
C+	2,50	$60 \leq C+ < 65$
C	2,00	$55 \leq C < 60$
D	1,00	$40 \leq D < 55$
E	0,00	$0 \leq E < 40$

Reading List	1. Arends, Richard I. 2004. Guide to Field Experiences and Portofolio Development: to accompany learning to teach .New York: McGrawHill Company 2. Kurniawan, Heru. 2021. Pengantar Praktis Penyusunan Instrumen Penelitian. Yogyakarta: Deepublish Publisher. 3. Widoyoko, Eko Putro. 2013. Teknik Penyusunan Instrumen Penelitian . Yogyakarta: Pustaka Pelajar.