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Supporting lecturer

## Universitas Negeri Surabaya Faculty of Education, Special Education Undergraduate Study Program

Courses		CODE	DE Course Family		Cr	edit We	eight		SEME	STER	Compilation			
				,								Date		
READ WRITE	BRAILLE	862020237	8	Study	/ Progran	n Elect	ive Course	s <b>T=</b>	1 P=1	ECTS=	3.18		5	July 17, 202
AUTHORIZA <sup>*</sup>	TION	SP Develo	per				Course (	Cluste	r Coor	dinator		Study	Progra	m Coordinato
			Prof. Dr. H. Murtadlo, M. Pd.; Acep Ovel Novari Beny, M.Pd			Novari	Prof. Dr. Hj. Sri Joeda Andajani, M. Kes				i, M.	Dr. H. Pamuji, M.Kes.		
Learning model	Project Based L	earning					-L				ı			
Program	PLO study pro	gram that is char	ged to the o	ourse										
Learning Outcomes	Program Object	tives (PO)												
(PLO)	PO - 1	Mastering basic th	neoretical con	cepts ab	out readi	ng and	writing bra	ille tha	at are re	elevant to	speci	ial educ	cation	
	PO - 2	Skilled in providing	g academic s	ervices a	nd specia	al need	ls program:	s rega	rding bi	raille reac	ding ar	nd writi	ng at PE	DBK
	PO - 3	Utilizing science a	nd technolog	y as a m	edia to he	elp ma	stery of the	conce	pt of re	ading an	ıd writi	ng brai	lle	
	PO - 4	Skilled in working communicating ide	independent eas, opinions	ly, collab and arg	orating ir uments c	n team orally/ir	s, taking re writing rela	spons ated to	ibility for	or both in	ndividu iting b	ıal and raille	team ta	asks, as well a
	PLO-PO Matrix													
		P.O												
		PO-1												
		PO-2												
		PO-3												
		PO-4	_											
		PO-4												
	PO Matrix at th	e end of each lea	arning stage	(Sub-F	O)									
	PO Matrix at th		arning stage	(Sub-F	O)									
	PO Matrix at th		arning stage	(Sub-F	0)			Weel	(					
	PO Matrix at th	e end of each lea	arning stage	(Sub-F		6	7 8	Weel	10	11	12	13	14	15 16
	PO Matrix at th	e end of each lea			,	6	7 8		1	11	12	13	14	15 16
	PO Matrix at th	e end of each lea			,	6	7 8		1	11	12	13	14	15 16
	PO Matrix at th	PO-1			,	6	7 8		1	11	12	13	14	15 16
	PO Matrix at th	P.O PO-1 PO-2				6	7 8		1	11	12	13	14	15 16
	PO Matrix at th	P.O PO-1 PO-2 PO-3				6	7 8		1	11	12	13	14	15 16
Short Course Description	This course exar system, mastery Language Braille	P.O PO-1 PO-2 PO-3	1 2	3 4	sading an	nd writing	ng braille th	9 arough	the his	story of the	he dev	velopmematics	ent of th	ne braille writin
Course	This course exar system, mastery Language Braille	PO-1 PO-2 PO-3 PO-4  mines and understar of the use of brair (Arabic and English	1 2	3 4	sading an	nd writing	ng braille th	9 arough	the his	story of the	he dev	velopmematics	ent of th	ne braille writin
Course Description	This course exar system, mastery Language Braille project assignme  1. Anderson 2. Alquran, 3. Depdikna 4. Depdikna 5. Depdikna 6. Loomis, 7. Perkins 5	PO-1 PO-2 PO-3 PO-4  mines and understar of the use of brair (Arabic and English	1 2 Inds the concept of the concept	ept of reals, basic g. Lectu  Handou , Jakarte Bahase Singka le Singka leindonesi aille in Te Press h	ading an braille res are con Pre-la: Mitrana Indone at Indone at Jakariwenty Le: istory. (Control of the control of the contro	d writing the definition of th	ng braille the and writing out using the and Beginr akarta: Dikrakarta: Dikrak	9  orough g acc ers Br nenum nenum iran, 2 ind Lo	the his production of	story of the to EYD, nethods of the total dak diterbased and dak dit	he dev mathe of pres	velopm ematics sentatio	ent of the	ne braille writin
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Week-	Final abilities of each learning stage (Sub-PO)	Eva	aluation	Learning Student As	earning, methods, signments, ted time]	Learning materials [ References	Assessment Weight (%)
	(Sub-PO)	Indicator	Criteria & Form	Offline ( offline )	Online ( online )	J	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Understand competencies, descriptions, sequences of braille reading and writing course material	Explaining competencies, descriptions, sequences of braille reading and writing course material	Criteria:  1.4: mention and explain the 4 CPs correctly  2.3: only mention and explain correctly the 3 CPs  3.2: name and explain correctly 2 CP  4.1: mention and explain 1 CP  5.0: did not answer  Form of Assessment: Participatory Activities	ScientificCollaborative 2 X 50		Material: Introduction to Braille Reference: Anderson, KJ, 2000. Learning by Touch: Handout on Pre-Braille and Beginners Braille. not published	5%
2	Students can understand, explain and analyze the history of the development of writing systems for the blind	1. Explain the history of the development of writing systems for the blind 2. Explain the early history of the development of the braille writing system 3. Explain the history of the development of the braille writing system 4. Explain the development of braille in modern times 5.  Development of braille writing instruments	Criteria: 1.4: mentions 4 figures 2.3: only mentions 3 characters 3.2: only mentions 2 figures 4.1: only mentions 1 character 5.0: did not answer.  Form of Assessment: Participatory Activities, Tests	Collaborative Scientific 2 X 50		Material: Introduction to Braille Library: Tarsidi, 2010. Learning Braille. Bandung, Indonesian University of Education, Postgraduate School.  Material: History of the Development of Braille Literature:	5%
3	Students are able to understand the use of braille writing tools	Explain the use of braille writing instruments using a reglet and stylus	Criteria:  1.4: mention and explain the 4 steps for installing paper on the reglet 2.3: just mention and explain exactly the 3 steps on how to install paper on the reglet 3.2: mention and explain exactly the 2 steps on how to install paper on the reglet 4.1: mention and explain 1 step how to install paper on the reglet 4.1: mention and explain 1 step how to install paper on the reglet 5.0: did not answer.  Form of Assessment: Participatory Activities, Tests	Collaborative Scientific 3 X 50		Material: use of braille writing tools Reference: Tarsidi, 2010. Learning Braille. Bandung, Indonesian University of Education, Postgraduate School.	5%

4	Constructing braille alphabet writing into simple words and sentences using a reglet and stylus	Describe the braille alphabet into simple words and sentences using a reglet and stylus	Criteria:  1.4: explain the 3 tools used to read and write braille correctly.  2.3: explain the 2 tools used to read and write braille correctly.  3.2: explain 1 phenomena and problems of learning ATN correctly using the tools to read and write braille correctly.  4.1: explain wrong.  Form of Assessment:  Project Results Assessment / Product Assessment	1. Scientific2. Collaborative 3 X 50	Material: use of braille writing tools Reference: Tarsidi, 2010. Learning Braille. Bandung, Indonesian University of Education, Postgraduate School.	5%
5	Constructing mathematical braille writing in recognizing number symbols, decimals, fractions and arithmetic operations using A4 reglet and stylus, as well as translating braille writing into visual writing	Composing mathematical braille writing to recognize number symbols     Composing mathematical braille writing in decimal numbers and fractions     Transferring braille writing to visual writing and vice versa	Criteria: 4: the results of each individual's exposure to writing braille and translating braille into sighted writing  Form of Assessment: Project Results Assessment / Product Assessment	1. Scientific2. Collaborative 3 X 50	Material: Braille Mathematics Reference: Tarsidi, 2010. Learning Braille. Bandung, Indonesian University of Education, Postgraduate School.	5%
6	Constructing mathematical braille writing in recognizing number symbols, decimals, fractions and arithmetic operations using A4 reglet and stylus, as well as translating braille writing into visual writing	Composing mathematical braille writing to recognize number symbols     Composing mathematical braille writing in decimal numbers and fractions     Transferring braille writing to visual writing and vice versa	Criteria: 4: the results of each individual's exposure to writing braille and translating braille into sighted writing  Form of Assessment: Practice / Performance	1. Scientific2. Collaborative 3 X 50	Material: Braille Mathematics Reference: Tarsidi, 2010. Learning Braille. Bandung, Indonesian University of Education, Postgraduate School.	5%
7	Constructing mathematical braille writing in recognizing number symbols, decimals, fractions and arithmetic operations using A4 reglet and stylus, as well as translating braille writing into visual writing	Composing mathematical braille writing to recognize number symbols     Composing mathematical braille writing in decimal numbers and fractions     Transferring braille writing to visual writing and vice versa	Criteria:  4: the results of each individual's exposure to writing braille and translating braille into sighted writing  Form of Assessment: Practice / Performance	1. Scientific2. Collaborative 3 X 50	Material: Braille Mathematics Reference: Ministry of National Education, 2000. Indonesian Braille MIPA Guidelines. Jakarta: Dikmenum Al- Quran, 2001	5%
8	UTS	UTS	Criteria: UTS  Form of Assessment: : Assessment of Project Results / Product Assessment, Practices / Performance	UTS 3 X 50	Material: UTS Library: Tarsidi, 2010. Learning Braille. Bandung, Indonesian University of Education, Postgraduate School.  Material: UTS Library: Anderson, KJ, 2000. Learning by Touch: Handout on Pre-Braille and Beginners Braille. not published	10%

9	· Understand braille learning using the Mibee Braille Converter version 4 program on the computer Applying MBC 4 in mathematics	Knowledge of Indonesian Braille	Criteria:  1.4: correct content and systematics 2.3: the content is correct, there are deficiencies in the systematics, OR the systematic content is correct 3.2: the content is partly correct, and partially correct systematically 4.1: partially correct and partially systematic OR partially correct and incorrect in content.  Form of Assessment: Practice / Performance	1.Scientific2. Collaborative 3 X 50	Material: Knowledge of Indonesian Reference: Ministry of National Education, 2000. Guidelines for Indonesian Braille Writing. Jakarta: Dikmenum	5%
10	Understand braille learning using the Mibee Braille Converter version 4 program on the computer Applying MBC 4 in mathematics	Demonstrating Indonesian Braille	Criteria:  1.4: correct content and systematics 2.3: the content is correct, there are deficiencies in the systematics, OR the systematic content is correct 3.2: the content is partly correct, and partially correct systematically 4.1: partially correct and partially systematic OR partially correct and incorrect in content.  Form of Assessment: Project Results Assessment / Product	1.Scientific2. Collaborative 3 X 50	Material: Demonstrating Indonesian Braille Reference: Ministry of National Education, 2000. Guidelines for Writing Indonesian Braille. Jakarta: Dikmenum	5%
11	Braille Science Knowledge	Braille Science Knowledge	Criteria:  1.4: correct content and systematics 2.3: the content is correct, there are deficiencies in the systematics, OR the systematic content is correct 3.2: the content is partly correct, and partially correct systematically 4.1: partially correct and partially systematic OR partially correct and incorrect in content.  Form of Assessment: Participatory Activities, Tests	· Collaborative Scientific 3 X 50	Material: Braille Science Knowledge Library: Ministry of National Education, 2000. Indonesian Braille MIPA Guidelines. Jakarta: Dikmenum Al- Quran, 2001	5%

12	- Applying MBC 4 in the field of reading and writing the Qur'an Applying MBC 4 in the field of English	Demonstrating IPA Braille	Criteria:  1.4: correct content and systematics 2.3: the content is correct, there are deficiencies in the systematics, OR the systematic content is correct 3.2: the content is partly correct, and partially correct systematically 4.1: partially correct and partially systematic OR partially correct and incorrect in content  Form of Assessment: Project Results Assessment / Product	1. Scientific2. Collaborative 3 X 50	Material: Demonstrating Braille Science Library: Ministry of National Education, 2000. Indonesian Braille MIPA Guidelines. Jakarta: Dikmenum Al- Quran, 2001	5%
13	· Applying MBC 4 in the field of reading and writing the Qur'an Applying MBC 4 in the field of English	Knowledge of Arabic Braille	Criteria:  1.4: correct content and systematics 2.3: the content is correct, there are deficiencies in the systematics, OR the systematic content is correct 3.2: the content is partly correct, and partially correct systematically 4.1: partially correct and partially systematic OR partially correct and incorrect in content  Form of Assessment: Project Results Assessment / Product Assessment	1. Scientific2. Collaborative 3 X 50	Material: Arabic Braille Knowledge Library: Al- Quran, 2001. Indonesian Braille Al- Quran., Jakarta: Mitranetra	5%
14	Demonstrate Arabic braille	Demonstrate Arabic braille	Criteria:  1.4: correct content and systematics 2.3: the content is correct, there are deficiencies in the systematics, OR the systematic content is correct 3.2: the content is partly correct, and partially correct systematically 4.1: partially correct and partially systematic OR partially correct and incorrect in content.  Form of Assessment: Project Results Assessment / Product Assessment	ScientificCollaborative 3 X 50	Material: Demonstrating Arabic Braille Reference: Al-Quran, 2001. Indonesian Braille Al- Quran., Jakarta: Mitranetra	5%

15	· Applying MBC 4 in the field of physics Applying MBC 4 in the field of chemistry	Knowledge and Demonstrate tusing braille	Criteria:  1.4: correct content and systematics 2.3: the content is correct, there are deficiencies in the systematics, OR the systematic content is correct 3.2: the content is partly correct, and partially correct systematically 4.1: partially correct and partially systematic OR partially correct and incorrect in content.  Form of Assessment: Assessment of Project Results / Product Assessment, Practices / Performance	ScientificCollaborative 3 X 50	Material: Knowledge and Demonstrating Tusing Braille Reference: Ministry of National Education, 2000. Guidelines for Short Indonesian Braille Writing. Jakarta: Dikmenum	5%
16	SUMATIVE EXAMINATION	SUMATIVE EXAMINATION	Criteria: SUMATIVE EXAMINATION  Form of Assessment: Project Results Assessment / Product Assessment	SUMATIVE TEST 3 X 50	Material: UAS Library: Tarsidi, 2010. Learning Braille. Bandung, Indonesian University of Education, Postgraduate School.	20%

**Evaluation Percentage Recap: Project Based Learning** 

No	Evaluation	Percentage
1.	Participatory Activities	12.5%
2.	Project Results Assessment / Product Assessment	57.5%
3.	Practice / Performance	22.5%
4.	Test	7.5%
		100%

## Notes

- Learning Outcomes of Study Program Graduates (PLO Study Program) are the abilities possessed by each Study Program
  graduate which are the internalization of attitudes, mastery of knowledge and skills according to the level of their study program
  obtained through the learning process.
- 2. The PLO imposed on courses are several learning outcomes of study program graduates (CPL-Study Program) which are used for the formation/development of a course consisting of aspects of attitude, general skills, special skills and knowledge.
- 3. Program Objectives (PO) are abilities that are specifically described from the PLO assigned to a course, and are specific to the study material or learning materials for that course.
- 4. **Subject Sub-PO (Sub-PO)** is a capability that is specifically described from the PO that can be measured or observed and is the final ability that is planned at each learning stage, and is specific to the learning material of the course.
- 5. Indicators for assessing ability in the process and student learning outcomes are specific and measurable statements that identify the ability or performance of student learning outcomes accompanied by evidence.
- Assessment Criteria are benchmarks used as a measure or measure of learning achievement in assessments based on
  predetermined indicators. Assessment criteria are guidelines for assessors so that assessments are consistent and unbiased. Criteria
  can be quantitative or qualitative.
- 7. Forms of assessment: test and non-test.
- 8. Forms of learning: Lecture, Response, Tutorial, Seminar or equivalent, Practicum, Studio Practice, Workshop Practice, Field Practice, Research, Community Service and/or other equivalent forms of learning.
- 9. Learning Methods: Small Group Discussion, Role-Play & Simulation, Discovery Learning, Self-Directed Learning, Cooperative Learning, Collaborative Learning, Contextual Learning, Project Based Learning, and other equivalent methods.
- Learning materials are details or descriptions of study materials which can be presented in the form of several main points and subtopics.
- 11. The assessment weight is the percentage of assessment of each sub-PO achievement whose size is proportional to the level of difficulty of achieving that sub-PO, and the total is 100%.
- 12. TM=Face to face, PT=Structured assignments, BM=Independent study.