	Universitas Negeri Surabaya Faculty of Education, Special Education Undergraduate Study Program	Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
ASSISTIVE TECHNOLOGY	8620202383	Compulsory Study Program Subjects	T=1	P=1	ECTS=3.18	5	January 10, 2023

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
	Ima Kurrotun Ainin, S.Pd., M.Pd.	Dr. Asri Wijiastuti, M.Pd.	Dr. H. Pamuji, M.Kes.

Learning model	**Project Based Learning**

Program Learning Outcomes (PLO)

PLO study program which is charged to the course	
PLO-8	Applying special education science based on technology and local wisdom by prioritizing inclusive education
PLO-12	Utilizing assistive media and technology in special education services
Program Objectives (PO)	
PO - 1	Mastering the concept of assistive technology development for PDBK
PO - 2	Utilizing assistive media and technology in special education services
PO - 3	Skilled in logical thinking to solve problems in the field of assistive technology according to their expertise based on scientific rules, procedures and ethics in order to produce solutions, ideas and designs.

PLO-PO Matrix

P.O	PLO-8	PLO-12
PO-1		
PO-2		
PO-3		

PO Matrix at the end of each learning stage (Sub-PO)

P.O	Week															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PO-1																
PO-2																
PO-3																

Short Course Description

The assistive technology course will examine the concept of assistive technology, the application of assistive technology for students with special needs, the development of assistive technology for students with special needs and evaluation of the use of assistive technology for students with special needs through case study methods, project based learning and small group discussions.

References

Main :

1. Al-Dababneh, K. A., & Al-Zboon, E. K. (2020). Using assistive technologies in the curriculum of children with specific learning disabilities served in inclusion settings: teachers' beliefs and professionalism. Disability and Rehabilitation: Assistive Technology , 1-11.
2. Lancioni, G. E., & Singh, N. N. (Eds.). (2014). Assistive technologies for people with diverse abilities . Springer Science & Business Media
3. OBrolcháin, F. (2018). Autonomy benefits and risks of assistive technologies for persons with intellectual and developmental disabilities. Frontiers in public health , 6 , 296.
4. Sorgini, F., Caliò, R., Carrozza, M. C., & Oddo, C. M. (2018). Haptic-assistive technologies for audition and vision sensory disabilities. Disability and Rehabilitation: Assistive Technology , 13 (4), 394-421.

Supporters:

	1. Video Penggunaan Teknologi Asistif
Supporting lecturer	Ima Kurrotun Ainin, S.Pd., M.Pd. Muhammad Nurul Ashar , S.Pd., M.Ed.

Week-	Final abilities of each learning stage (Sub-PO)	Evaluation		Help Learning, Learning methods, Student Assignments, [Estimated time]		Learning materials [References]	Assessment Weight (%)
		Indicator	Criteria & Form	Offline (*offline*)	Online (*online*)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Through direct learning and small discussions, students are able to explain the concept of assistive technology	Students explain the definition of assistive technology Students explain the development of assistive technology Students explain the types of assistive technology	**Criteria:** 1.4: Opinions are appropriate and supported by references 2.3: Opinions are appropriate but not supported by references 3.2: Opinion is not appropriate 4.1: Opinions do not match at all **Form of Assessment** : Practice / Performance	Direct Learning, Small Group Discussion 2 X 50		**Material:** Assistive Technology Concepts **References:** *Lancioni, GE, & Singh, NN (Eds.). (2014). Assistive technologies for people with diverse abilities. Springer Science & Business Media*	3%
2	Through direct learning and small discussions, students are able to explain the concept of assistive technology	Students explain the definition of assistive technology Students explain the development of assistive technology Students explain the types of assistive technology	**Criteria:** 1.4: Opinions are appropriate and supported by references 2.3: Opinions are appropriate but not supported by references 3.2: Opinion is not appropriate 4.1: Opinions do not match at all **Form of Assessment** : Participatory Activities	Direct Learning, Small Group Discussion 2 X 50		**Material:** Assistive Technology Concepts **References:** *Lancioni, GE, & Singh, NN (Eds.). (2014). Assistive technologies for people with diverse abilities. Springer Science & Business Media*	3%
3	Through direct learning and small discussions, students are able to explain the concept of assistive technology	Students explain the definition of assistive technology Students explain the development of assistive technology Students explain the types of assistive technology	**Criteria:** 1.4: Opinions are appropriate and supported by references 2.3: Opinions are appropriate but not supported by references 3.2: Opinion is not appropriate 4.1: Opinions do not match at all **Form of Assessment** : Participatory Activities	Direct Learning, Small Group Discussion 2 X 50		**Material:** Assistive Technology Concepts **References:** *Lancioni, GE, & Singh, NN (Eds.). (2014). Assistive technologies for people with diverse abilities. Springer Science & Business Media*	3%

4	Through case studies, students are able to explain the problems of using assistive technology experienced by students with special physical and sensory, intellectual, psychological and multiple disabilities.	Students are able to explain the problems of using assistive technology experienced by students with special physical and sensory needs. Students are able to explain the problems of using assistive technology experienced by students with special intellectual needs. Students are able to explain the problems of using assistive technology experienced by students with special psychological needs. Students are able to explain problems of using technology assistance experienced by students with special needs, multiple disorders.	**Criteria:** Rubric: Score 4 if done very well, Score 3 if done well, Score 2 if done adequately, Score 1 if not done **Form of Assessment** : Participatory Activities	Case-study 2 X 50		**Material:** Problems in the use of assistive technology **Reference:** *OBrolcháin, F. (2018). Autonomy benefits and risks of assistive technologies for persons with intellectual and developmental disabilities. Frontiers in public health, 6, 296.*	2%
5	Through case studies, students are able to explain the problems of using assistive technology experienced by students with special physical and sensory, intellectual, psychological and multiple disabilities.	Students are able to explain the problems of using assistive technology experienced by students with special physical and sensory needs. Students are able to explain the problems of using assistive technology experienced by students with special intellectual needs. Students are able to explain the problems of using assistive technology experienced by students with special psychological needs. Students are able to explain problems of using technology assistance experienced by students with special needs, multiple disorders.	**Criteria:** Rubric: Score 4 if done very well, Score 3 if done well, Score 2 if done adequately, Score 1 if not done **Form of Assessment** : Participatory Activities	Case-study 2 X 50		**Material:** Problems in the use of assistive technology **Reference:** *OBrolcháin, F. (2018). Autonomy benefits and risks of assistive technologies for persons with intellectual and developmental disabilities. Frontiers in public health, 6, 296.*	3%

6	Through case studies, students are able to explain the problems of using assistive technology experienced by students with special physical and sensory, intellectual, psychological and multiple disabilities.	Students are able to explain the problems of using assistive technology experienced by students with special physical and sensory needs. Students are able to explain the problems of using assistive technology experienced by students with special intellectual needs. Students are able to explain the problems of using assistive technology experienced by students with special psychological needs. Students are able to explain problems of using technology assistance experienced by students with special needs, multiple disorders.	**Criteria:** Rubric: Score 4 if done very well, Score 3 if done well, Score 2 if done adequately, Score 1 if not done **Form of Assessment** : Participatory Activities	Case-study 2 X 50		**Material:** Problems in the use of assistive technology **Reference:** *OBrolcháin, F. (2018). Autonomy benefits and risks of assistive technologies for persons with intellectual and developmental disabilities. Frontiers in public health, 6, 296.*	3%
7	Through case studies, students are able to explain the problems of using assistive technology experienced by students with special physical and sensory, intellectual, psychological and multiple disabilities.	Students are able to explain the problems of using assistive technology experienced by students with special physical and sensory needs. Students are able to explain the problems of using assistive technology experienced by students with special intellectual needs. Students are able to explain the problems of using assistive technology experienced by students with special psychological needs. Students are able to explain problems of using technology assistance experienced by students with special needs, multiple disorders.	**Criteria:** Rubric: Score 4 if done very well, Score 3 if done well, Score 2 if done adequately, Score 1 if not done **Form of Assessment** : Participatory Activities	Case-study 2 X 50		**Material:** Problems in the use of assistive technology **Reference:** *OBrolcháin, F. (2018). Autonomy benefits and risks of assistive technologies for persons with intellectual and developmental disabilities. Frontiers in public health, 6, 296.*	3%

8	UTS	UTS	**Criteria:** Completeness **Form of Assessment** : Assessment of Project Results / Product Assessment, Practices / Performance	UTS 2 X 50		**Material:** UTS **Library:** *Video on the Use of Assistive Technology*	20%
9	Through problem-based learning and small-group discussion methods, students are able to evaluate the application of assistive technology for students with special physical and sensory, intellectual, psychological and multiple disabilities.	Students are able to evaluate the application of assistive technology for students with special physical and sensory needs. Students are able to evaluate the application of assistive technology for students with special intellectual needs. Students are able to evaluate the application of assistive technology for students with special psychological needs. Students are able to evaluate the application of assistive technology for students with special needs with disabilities plural.	**Criteria:** Rubric: Score 4 if done very well, Score 3 if done well, Score 2 if done adequately, Score 1 if not done **Form of Assessment** : Participatory Activities	Problem-based learning, small-group discussion 2 X 50		**Material:** Evaluation of Assistive Technology **References:** *Sorgini, F., Caliò, R., Carrozza, MC, & Oddo, CM (2018). Haptic-assistive technologies for audition and vision sensory disabilities. Disability and Rehabilitation: Assistive Technology, 13(4), 394-421.*	6%
10	Through problem-based learning and small-group discussion methods, students are able to evaluate the application of assistive technology for students with special physical and sensory, intellectual, psychological and multiple disabilities.	Students are able to evaluate the application of assistive technology for students with special physical and sensory needs. Students are able to evaluate the application of assistive technology for students with special intellectual needs. Students are able to evaluate the application of assistive technology for students with special psychological needs. Students are able to evaluate the application of assistive technology for students with special needs with disabilities plural.	**Criteria:** Rubric: Score 4 if done very well, Score 3 if done well, Score 2 if done adequately, Score 1 if not done **Form of Assessment** : Participatory Activities, Practice/Performance	Problem-based learning, small-group discussion 2 X 50		**Material:** Evaluation of Assistive Technology **References:** *Sorgini, F., Caliò, R., Carrozza, MC, & Oddo, CM (2018). Haptic-assistive technologies for audition and vision sensory disabilities. Disability and Rehabilitation: Assistive Technology, 13(4), 394-421.*	4%

11	Through problem-based learning and small-group discussion methods, students are able to evaluate the application of assistive technology for students with special physical and sensory, intellectual, psychological and multiple disabilities.	Students are able to evaluate the application of assistive technology for students with special physical and sensory needs. Students are able to evaluate the application of assistive technology for students with special intellectual needs. Students are able to evaluate the application of assistive technology for students with special psychological needs. Students are able to evaluate the application of assistive technology for students with special needs with disabilities plural.	**Criteria:** Rubric: Score 4 if done very well, Score 3 if done well, Score 2 if done adequately, Score 1 if not done **Form of Assessment** : Participatory Activities	Problem-based learning, small-group discussion 2 X 50		**Material:** Evaluation of Assistive Technology **References:** *Sorgini, F., Caliò, R., Carrozza, MC, & Oddo, CM (2018). Haptic-assistive technologies for audition and vision sensory disabilities. Disability and Rehabilitation: Assistive Technology, 13(4), 394-421.*	4%
12	Through problem-based learning and small-group discussion methods, students are able to evaluate the application of assistive technology for students with special physical and sensory, intellectual, psychological and multiple disabilities.	Students are able to evaluate the application of assistive technology for students with special physical and sensory needs. Students are able to evaluate the application of assistive technology for students with special intellectual needs. Students are able to evaluate the application of assistive technology for students with special psychological needs. Students are able to evaluate the application of assistive technology for students with special needs with disabilities plural.	**Criteria:** Rubric: Score 4 if done very well, Score 3 if done well, Score 2 if done adequately, Score 1 if not done **Form of Assessment** : Participatory Activities	Problem-based learning, small-group discussion 2 X 50		**Material:** Evaluation of Assistive Technology **References:** *Sorgini, F., Caliò, R., Carrozza, MC, & Oddo, CM (2018). Haptic-assistive technologies for audition and vision sensory disabilities. Disability and Rehabilitation: Assistive Technology, 13(4), 394-421.*	4%

13	Through project based learning, students are able to create assistive technology based on needs assessment and analysis of technology specifications.	Students are able to design assistive technology based on needs assessment and analysis of technology specifications. Students are able to assemble assistive technology based on needs assessment and analysis of technology specifications. Students are able to criticize assistive technology that has been developed by other groups.	**Criteria:** Rubric: Score 4 if done very well, Score 3 if done well, Score 2 if done adequately, Score 1 if not done **Form of Assessment** : Project Results Assessment / Product Assessment	Project-based learning, small-group discussions, and 2 X 50 presentations		**Material:** Development of assistive technology **References:** *Al-Dababneh, KA, & Al-Zboon, EK (2020). Using assistive technologies in the curriculum of children with specific learning disabilities served in inclusion settings: teachers' beliefs and professionalism. Disability and Rehabilitation: Assistive Technology, 1-11.*	4%
14	Through project based learning, students are able to create assistive technology based on needs assessment and analysis of technology specifications.	Students are able to design assistive technology based on needs assessment and analysis of technology specifications. Students are able to assemble assistive technology based on needs assessment and analysis of technology specifications. Students are able to criticize assistive technology that has been developed by other groups.	**Criteria:** Rubric: Score 4 if done very well, Score 3 if done well, Score 2 if done adequately, Score 1 if not done **Form of Assessment** : Project Results Assessment / Product Assessment	Project-based learning, small-group discussions, and 2 X 50 presentations		**Material:** Development of assistive technology **References:** *Al-Dababneh, KA, & Al-Zboon, EK (2020). Using assistive technologies in the curriculum of children with specific learning disabilities served in inclusion settings: teachers' beliefs and professionalism. Disability and Rehabilitation: Assistive Technology, 1-11.*	4%
15	Through project based learning, students are able to create assistive technology based on needs assessment and analysis of technology specifications.	Students are able to design assistive technology based on needs assessment and analysis of technology specifications. Students are able to assemble assistive technology based on needs assessment and analysis of technology specifications. Students are able to criticize assistive technology that has been developed by other groups.	**Criteria:** Rubric: Score 4 if done very well, Score 3 if done well, Score 2 if done adequately, Score 1 if not done **Form of Assessment** : Project Results Assessment / Product Assessment	Project-based learning, small-group discussions, and 2 X 50 presentations		**Material:** Development of assistive technology **References:** *Al-Dababneh, KA, & Al-Zboon, EK (2020). Using assistive technologies in the curriculum of children with specific learning disabilities served in inclusion settings: teachers' beliefs and professionalism. Disability and Rehabilitation: Assistive Technology, 1-11.*	4%

16	UAS	UAS	**Criteria:** Completeness **Form of Assessment** : Project Results Assessment / Product Assessment	UAS 2 X 50		**Material:** uas **References:** *Al-Dababneh, KA, & Al-Zboon, EK (2020). Using assistive technologies in the curriculum of children with specific learning disabilities served in inclusion settings: teachers' beliefs and professionalism. Disability and Rehabilitation: Assistive Technology, 1-11.*	30%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	33%
2.	Project Results Assessment / Product Assessment	52%
3.	Practice / Performance	15%
		100%

Notes

1. **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.
6. **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.
10. **Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
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.