

SEMESTER LESSON PLAN (RPS)

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| COURSES | : | S3 Educational Technology |
| COURSES | : | Tests and Measurements in Education |
| WEIGHT | : | 3 credits |
| LECTURERS | : | Prof. Dr. Atwi Suparman, M.Sc. Dr. Moch. Sukardjo, M.Pd |



POSTGRADUATE
JAKARTA STATE UNIVERSITY
2021



**JAKARTA STATE UNIVERSITY
FACULTY OF EDUCATION
S3 EDUCATIONAL TECHNOLOGY STUDY PROGRAM**

**SEMESTER LESSON PLAN
(RPS)**

| COURSES | CODE | WEIGHTS (CREDITS) | SEMESTER | TIME | DATE OF DRAFTING |
|-------------------------------------|---|----------------------|---|---|--|
| Tests and Measurements in Education | 00000012 | 2 | 6 | 16 Minggu (September-December 2020) | 2 September 2020 |
| AUTHORIZATION | Lecturers | | Reviewer/Quality Assurance | | <input type="checkbox"/> the advantage of Prodi |
| | Prof. Dr. Atwi Suparman, M.Sc. Dr. Moch. Sukardjo, M.Pd | | Dr. Nurjanah, M.Pd/ Ade Utami, P.hD/ Prof. Dr. Herlina, M.Pd | | Dr. Moch. Sukardjo, M.Pd |
| DESCRIPTION | <p>Education in general and learning in particular are inseparable from the need for tests and measurements. In the field of educational technology, the objects that are tested and measured by measure concern the quality of learning processes and outcomes while in the field of education the objects measured are certainly broader such as governance, leadership, and education management, development of educational resources and others. Various terminologies that are used and interrelated with learning tests and measurements are assessments, tests, measurements, and learning evaluations. This course will contain various concepts, principles, and procedures for conducting tests and measurements in learning.</p> <p>In it are discussed various topics related to: various levels of measurement, learning objectives that are the basis of measurement, norm referenced and criterion referenced measurement, various types of tests such as objective tests, balance tests, performance measurements, portfolios, validity and reliability as well as usability tests, scoring techniques and kor analysis obtained, marking systems, measurements for procedures, products and behavior and other related concepts such as peer appraisal, self-report, attitude measurement, interest inventories, and personality measurement.</p> | | | | |

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| | <p>This lecture process involves theories presented by lecturers and students, discussion of the concepts and practices of tests and measurements, student practical experiences to develop test and measurement instruments, small seminars held by students in the classroom about the concepts, principles, procedures for implementing tests and implementation as well as discussions on the phenomenon of using tests for learning, research, dissertation writing, as well as the needs of the educational community in general.</p> <p>Throughout the lectures students gradually create a porto folio to demonstrate their mastery in theory and practice of tests, measurements and assessments on tasks as teachers and education managers. Porto folio products are one of the most important parts of assessing student success in this course in addition to the success of completing the test during the final semester exam. In addition, the anticipation and projection of students about the use of tests and measurements for their dissertation research is no less important part so that in the preparation of the porto folio can be related to the needs of research and writing their dissertation.</p> | | |
| GRADUATE LEARNING OUTCOMES (CPL) | Attitude | 1. Internalizing academic values, norms, and ethics (S8) 2. Demonstrate an attitude of responsibility for work in their field of expertise independently. (S9) | |
| | General experience | 1. Able to find or develop scientific theories / conceptions / ideas, and contribute to the development, as well as the practice of science and / or technology that pays attention to and applies the value of the humanities in their field of expertise, by producing scientific research based on scientific methodologists , logical, critical, systematic, and creative thinking (KU 1) | |
| | Knowledge | 1. Mastering theory, approach and system thinking, design models and learning development to expand and develop the Educational Technology (P1) area | |
| | Special skills | 1. Able to develop new knowledge, technology, and / or art in the field of Educational Technology or professional practice through research, to produce works, creative, original, tested (KK 1) 2. Able to develop learning and training systems or models for use in government institutions and the industrial business world (KK 2) | |
| COURSE LEARNING OUTCOMES (CPMK) | CPMK | | Sub-CPMK |
| | 1. Develop test and measurement tools that are in accordance with the learning objectives of the course or subject you are studying | | Develop learning outcomes tests in cognitive and psychomotor areas |
| | 2. Anticipate the needs of preparing test and measurement tools that are suitable for your dissertation research | | Constructing measurement tools within the effective area |
| | | | Test the validity, reliability, and usability of other tests and assessment tools Analyze test results and measurements and assessments |

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| | 3. Develop a problem-solving concept of tests, measurements and assessments in the educational institution you work with | Analyze the phenomenon of tests, measurements and assessments carried out in the educational institution where you work |
| Study Materials | STUDY MATERIALS/ SUBJECT MATTER | SUB- STUDY MATERIALS /SUB-SUBJECT MATTER |
| | 1. Review, refine, and solidify the initial draft of learning materials that have been produced while participating in the Instructional Design course in the last semester | 1.1. Instructional Design Book Surgery |
| | | 1.2. Creating an Instructional Design Model |
| | | 1.3. Creating an Instructional Design Model |
| | 2. Designing and carrying out formative evaluations of these initial drafts in their respective workplaces so that they become physical models of learning materials that are ready to be used in the field | 2.1. Designing Formative Evaluations |
| | | 2.2. How to collect data and menganalisis data <i>One-to-One Evaluation</i> |
| | | 2.3. How to compile a Formative Evaluation Report |
| | 3. By acting as an external evaluator, you design a summative evaluation of learning materials that have been in the field | 3.1. Summative Evaluation |
| | | 3.2. The relationship between implementation, summative evaluation, and diffusion of innovation |
| | | 3.3. The concept of implementation |
| | 4. Designing the dissemination process by applying the concept of diffusion of innovation to learning materials that have been proven to be effective and efficient in the field | 4.1. The concept of summative evaluation |
| | | 4.2. The concept of diffusion of innovation |
| 4.3. Portfolio | | |
| 4.4. Portfolio | | |
| LEARNING ACTIVITIES | Pedekatan | <i>Student centered learning..</i> |
| | Methods/strategi es | Lectures, questions and answers, discussions, assignments, <i>project based learning.</i> |

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|---------------------------|--------------------|--|
| | Mode of activity | Online <i>learning: Synchronous and Asynchronous models.</i> |
| | Assignment | Create papers, paper presentations, case analysis, project tasks personally |
| VALUATION | Methods/techniques | Written exams, Performance Appraisal, Product Appraisal, Attitude Assessment. |
| | Instrument | Writing questions, Rating <i>scale</i> , Rubric . |
| REFERENCE | Main | <ol style="list-style-type: none"> 1. Hopkins, Charles D. dan Antes, Richard L.. (1985). Classroom Measurement & Evaluation 2nd. Ed.. Itasca, Illinois : F.E. Peacock Publisher, INC 2. A.N Oppenheim. (1996). Questionnaire Design, Interviewing and attitude Measurement (New Ed.). London : Continuum. 3. Kubiszyn, Tom and Borich, Gary D. (2013). Educational Testing and Measurement : Classroom Application and Practice (10th. ED). USA : Scott, Foresman and Company 4. Wiersma, William and Jurs, Stephen G. (1990). Educational Measurement and Testing (2nd . Ed). Boston : Allyn and Bacon 5. Popham, W. James. (2000). Modern Educational Measurement : Practical Guidelines for Educational Leaders (3rd .ed). Boston : Allyn and Bacon 6. Miller, M. David, Linn, Robert L., and Groundlound, Norman E. (2009). Measurement and Assessment in Teaching (10th. Ed). New Jersey : Pearson 7. Gronlound, Norman E. and Linn, Robert L., (1990). Measurement and Evaluation in Teaching. New York : Macmillan Publishing Company 8. Mehrens, William A. And Lehmann, Irvin J. (1991). Measurement and Evaluation in Education and Psychology. New York. Wadsworth : Tomson Learning 9. Aiken, Lewis R. (1996). Rating Scales and Checklists : Evaluating Behavior, Personality, and Attitude. New York : John Willey & Sons Inc. |
| | Supporter | - |
| MATA COLLEGE TERMS | - | |

| DETAILS OF THE ACTIVITY PLAN | | | | | | | | |
|------------------------------|--|--|--|--|---|---|--|------------------------|
| Week To: | Learning Outcomes (Sub-CPMK) | Material (Study Material) | Success Indicators | Forms of Learning; Learning Methods; Assignment; | | Time allocation | Source/ Media | Assessment/ Assignment |
| | | | | <i>Synchronous:</i> | <i>Asynchronous:</i> | | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| 1-3 | Develop learning outcomes tests in cognitive and psychomotor areas | <ol style="list-style-type: none"> 1. RPS Test and Measurement Subjects 2. Definition of Principles and intentions of assessment, test, measurement, and evaluation 3. Various actual problems of implementation in the field | <p>At the end of 1, 2, and 3 students are expected to be able to :</p> <ol style="list-style-type: none"> 1. Distinguishing concepts and principles between test assessment, and evaluation 2. Analyze various actual problems of test implementation and measurement in the field | <p>Virtual face-to-face via <i>zoom meeting</i>:</p> <ul style="list-style-type: none"> • Explanation of principles, intentions of assessment, tests, measurements and evaluations • Case-based learning of test implementation and measurement in the field | <p>Analyze actual cases of various problems in the implementation of tests and measurements in the field</p> <p>(Critical thinking, communication, collaboration)</p> | <p>TM: 3x50'</p> <p>BT: 3x60'</p> <p>BM: 3x 60'</p> | <ol style="list-style-type: none"> 1. Measurement and assessment in Teaching (MAT, pp 28-31) 2. Measurement and Evaluation in Education and Psychology (MEE 4-14) 3. Educational Measurement and Testing (EMT, pp 7-10) | |

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|-----|--|--|---|---|--|---|--|---|
| | | | | (Critical thinking, communication, collaboration) | | | | |
| 4-5 | Constructing measurement tools within the effective area | Norm and Criterion Referenced Measurement | At the end of the meeting 4-5 students are expected to be able to : 1. Membedakan berbagai level of measurement 2. Analyze the relationship between learning objectives and assessment 3. Analyze conceptual and practical differences between Norm and Criterion Referenced Measurement | Virtual face-to-face via <i>zoom meeting</i> : Discussion and analysis of various levels of measurement; the relationship between learning and assessment; conceptual and practical differences between norm and criterion referenced measurement (Critical thinking, communication, collaboration) | Lookingfor various references related to the level of measurement (Critical thinking, collaboration) | TM: 3x50' BT: 3x60' BM: 3x 60' | 1. Educational Measurement and Testing (EMT, pp 13-19) | |
| 6-7 | Analyze test results and measurements and assessments | 1. Writing an Objective Test a. True – False b. Matching | At the end of the 6th and 7th meeting, students | Virtual face-to-face via <i>zoom meeting</i> : | a. Make 4 objective test types, 1 essay test item, and | TM: 3x50' BT: | | Individual Task 1 : a.Make 4 items of objective test |

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| | | <ul style="list-style-type: none"> c. Multiple Choice d. Complete e. Advantages And Disadvantages Of Each Type Of Test <p>2. Writing the Esei Test</p> <ul style="list-style-type: none"> a. Esei Test Concept b. Measuring Cognitive Skills or Processes c. Extended Response d. Restricted Response e. Advantages of the Esei Test f. Disadvantages of the Esei Test g. Advice in writing the Esei Test h. Scoring i. Advice on Scoring | <p>are expected to be able to :</p> <p>1. Constructing objective tests, essay tests, open book exams tests</p> | <p>Conducting simulations constructing objective tests, essay tests, open book tests</p> <p>(Critical thinking, communication, collaboration, creative)</p> | <p>1 open book test item and its answer key that is relevant to certain specific learning objectives</p> <p>(Critical thinking, collaboration, creative)</p> | <p>3x60'</p> <p>BM: 3x 60'</p> | | <p>types that are relevant to specific learning objectives</p> <ul style="list-style-type: none"> b. Make 1 item of the balance test that can replace the 4 objective test items mentioned above c. Make 1 open book exams that are relevant to the learning objectives mentioned above d. Create the answer key for each test item mentioned in items 5a, 5b, 5c mentioned above <p>Maximum Score of 10 (3 + 3 + 2 + 2)</p> |
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| | | 3. Open - Book Exams Esei Writing Guidelines, Knowledge Organization, and Open Book Exams | | | | | | |
| 8 | UTS | | | | | TM: 3x50' BT: 3x60' BM: 3x 60' | | |
| 9 | Analyze the phenomenon of tests, measurements and assessments carried out in the educational institution where you work | 1. Performance Based Assessment : a. Performance test : Direct Measures of Competence b. Performance Test : Can Assess Processes and Product c. Performance Test : Can be Embedded in Lesson | At the end of the meeting 8 students are expected to be able to : 1. Comparing differences in the use of various performance tests in the context of performance-based assessment 2. Develop performance | Virtual face-to-face via <i>zoom meeting</i> : Small group discussions to compare differences in the use of various performance tests and develop performance appraisal tools and their rubrics | Create a developed test scoring rubric (Critical thinking, collaboration, creative) | TM: 3x50' BT: 3x60' BM: 3x 60' | 1. Educational Testing and Measurement : Classroom Application and Practice (ETM, pp 183-200) 2. Educational Testing and Measurement : Classroom Application and Practice (ETM, pp 203-218) | |

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|-------|--|---|---|--|--|---|---|---|
| | | <p>d. Performance Test : Can Assess Affective and Social Skills</p> <p>e. Developing Performances Test for your learner</p> <p>Portfolio Assessment</p> | <p>appraisal tools including porto folios and their respective rubrics</p> | <p>(Critical thinking, communication, collaboration, creative)</p> | | | | |
| 10-11 | <p>Test the validity, reliability, and usability of other tests and assessment tools</p> | <p>1. Validity</p> <p>2. Reliability</p> <p>3. Usability</p> | <p>At the end of the 9th and 10th meeting, students are expected to be able to distinguish various concepts of validity, reliability, and usability in tests, measurements and assessments.</p> | <p>Virtual face-to-face via <i>zoom meeting</i>: Simulation of calculation of validity, reliability and usability in tests, measurements and assessments.</p> <p>(Critical thinking, communication, collaboration, creative)</p> | <p>Studying from various references related to validity, reliability</p> <p>(Critical thinking, collaboration, creative)</p> | <p>TM: 3x50'</p> <p>BT: 3x60'</p> <p>BM: 3x 60'</p> | <p>1. Educational Testing and Measurement : Classroom Application and Practice (ETM, pp 326-336)</p> <p>2. Modern Educational Measurement (MEM, hal 89-115)</p> <p>3. MEM, pp 105-106</p> <p>4. Educational Testing and Measurement : Classroom Application and Practice (ETM, pp 338-346)</p> <p>5. Measurement and Assessment</p> | <p>Individual Tasks IV</p> <p>a. Identify problems with the application of the concepts of validity, reliability, and usability in your educational institution</p> <p>b. Next describe your idea to solve the problem mentioned above</p> |

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| | | | | | | | <p>in Teaching (MAT, pp 127-128)</p> <p>6. Measurement and Assessment in Teaching (MAT, pp 124-126)</p> <p>Measurement and Assessment in Teaching (MAT, pp 132-134)</p> | Maximum score of 10 (5+5) |
| 12-13 | Analyze the phenomenon of tests, measurements and assessments carried out in the educational institution where you work | <ol style="list-style-type: none"> 1. Execute, score, and Analyze Tests 2. Marks dan Marking System 3. Interpreting Test Scores and Norms | <p>At the end of the meeting 11-12 students are expected to be able to</p> <ol style="list-style-type: none"> 1. Execute and provide scores 2. Analyze test results into scores and learning outcome scores. | <p>Virtual face-to-face via <i>zoom meeting</i>: Simulations provide scores and scores on test results / learning outcomes</p> <p>(Critical thinking, communication, collaboration, creative)</p> | <p>Calculating scores and scores from developed tests</p> <p>(Critical thinking, collaboration, creative)</p> | <p>TM: 3x50'</p> <p>BT: 3x60'</p> <p>BM: 3x 60'</p> | <ol style="list-style-type: none"> 1. Educational Testing and Measurement : Classroom Application and Practice (ETM, pp 223-242) 2. Educational Testing and Measurement : Classroom Application and Practice (ETM, pp 243-251) 3. MEM, pp 174-196 4. MAT, hal 471-487 | |

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| 14 | Analyze the phenomenon of tests, measurements and assessments carried out in the educational institution where you work | | At the end of the meeting, 13-14 students are expected to be able to take measurements about procedures, products and behaviors using non-test assessment tools | Virtual face-to-face via <i>zoom meeting</i> : Discussion and simulation of procedures, products and behaviors using non-test assessment tools (Critical thinking, communication, collaboration, creative) | Doing independent tasks makes 3 examples of rating scales from 2 question items (Critical thinking, collaboration, creative) | TM: 3x50' BT: 3x60' BM: 3x 60' | <ol style="list-style-type: none"> 1. MET, hal 377-384 2. RSC, hal 24-53 3. RSC, hal 225-250, 51-57 4. RSC, hal 34-45 5. QDI, pp 100-117 CME, thing 63-70 | <p>Individual Tasks V Create examples of 3 kinds of rating scales of 2 items each to measure the quality of your respective learning Maximum score of 10 (3+3+4)</p> <p>Individual Tasks VI a. Create examples of performance appraisals and their assessment rubrics b. Create an example of a portfolio and its scoring rubric Maximum score of 10 (5+5)</p> |
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| 15 | Analyze the phenomenon of tests, measurements and assessments carried out in the educational institution where you work | tests, measurements and assessments | Tests, measurements and assessments carried out in the educational institution where you work | Virtual face-to-face via <i>zoom meeting: Cased based learning</i> related to Tes, measurements and assessments carried out at educational institutions in each student's workplace (Critical thinking, communication, collaboration, creative) | Group discussions related to assessment at student agencies (Critical thinking, collaboration, creative, communication) | TM: 3x50' BT: 3x60' BM: 3x 60' | <ol style="list-style-type: none"> 1. MET, hal 377-384 2. RSC, hal 24-53 3. RSC, hal 225-250, 51-57 4. RSC, hal 34-45 5. QDI, pp 100-117 6. CME, thing 63-70 | |
| 16 | UAS | | | | | | | |

ATTACHMENT

The value of your learning outcomes will be determined by the results of 5 individual assignments during the lecture as described in the lecture activity and one UAS at the end of the lecture. The maximum value weight of the individual task is maximum as follows:

| No | Task To | Shoes |
|----|---|-------|
| 1 | <p>Individual Tasks I</p> <p>a. Create 4 items of objective test types which are relevant to certain specific learning objectives</p> <p>b. Make 1 item of the balance test that can replace the 4 objective test items mentioned above</p> <p>c. Make 1 open book exams that are relevant to the learning objectives mentioned above</p> <p>d. Create the answer key for each test item mentioned in items 5a, 5b, 5c, mentioned above</p> | 10 |
| 2 | <p>Task II</p> <p>a. Create performance appraisal tools according to specific specific learning objectives</p> <p>b. Create a rubric of the assessment tool</p> | 10 |
| 3 | <p>Individual Tasks III</p> <p>a. Create a porto folio assessment tool according to specific general learning objectives</p> <p>b. Create a rubric of the assessment tool</p> | 10 |
| 4 | <p>Individual Tasks IV</p> <p>c. Identify problems of applying the concepts of validity, reliability, usability in your educational institution</p> <p>d. Ideas for overcoming the problem mentioned above</p> | 10 |

WEIGHT OF ASSESSMENT

- a. Attitude 15%
- b. General skills 20 %
- c. Special skills 25%
- d. Knowledge 40%

GRADUATION KITERIA

| MASTERY RATE (%) | LETTER | NUMBER | INFORMATION |
|------------------|--------|--------|--------------------------|
| 86 – 100 | A | 4 | Pass |
| 81 - 85 | A- | 3,7 | Pass |
| 76 - 80 | B+ | 3,3 | Pass |
| 71 - 75 | B | 3,0 | Pass |
| 66 - 70 | B- | 2,7 | Pass |
| 61 - 65 | C+ | 2,3 | Pass |
| 56 - 60 | C | 2,0 | Pass |
| 51 - 55 | C- | 1,7 | Haven't Graduated Yet |
| 46 – 50 | D | 1 | Haven't Graduated Yet |
| 0 - 45 | And | 0 | Haven't Graduated Yet |

ASSESSMENT SHEET PRESENTATION

Study program :
 Courses :
 Semester :
 Student name:
 Assignment/product : presentation in a class discussion
 Assessment date :

Presentation Assessment Sheet :

Name Member Group:

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|-------|
| VALUE |
|-------|

Title: _____

Percentage date : _____

| NO | ASPECTS | S | N | NOTE |
|-----------|---|------------|---|------|
| I | Papers | (1) | | |
| | 1. Readiness | 0.2 | | |
| | 2. Systematics | 0.2 | | |
| | 3. Contains important concepts ² from Journal / Book Studies | 0.6 | | |
| II | Serving | (5) | | |
| | 1. Clearly state the core content of the Subject Matter | 1.5 | | |
| | 2. Kajian/Kontekstulasi | 2 | | |
| | 3. Using PPT/Video or other relevant tools | 0.5 | | |
| | 4. Provide responses to the content of the Chapter | 0.5 | | |

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| | 5. Communication Skills | 0.5 | | |
| III | Discussion | (3) | | |
| | 1. Ability to express opinions critically | 1 | | |
| | 2. Response to a question or comment | 1 | | |
| | 3. Consistency of the discussion material with the subject matter | 1 | | |
| IV | Group Cooperation | (1) | | |
| | 1. Liveliness | 0.3 | | |
| | 2. Responsibility | 0.3 | | |
| | 3. Responses | 0.2 | | |
| | 4. Teamwork | 0.2 | | |
| | Sum | (10) | | |

Appraiser Name: _____

ASSESSMENT SHEET WORKS

Study program :

Courses :

Semester :

Student name:

Tasks/products :

Assessment date :

| No | Assessed aspects | Weight (%) | Shoes (1-5) | Value (bobotxskor) |
|---------------------|---|------------|-------------|--------------------|
| 1 | Use of references/sources | 10 | | |
| 2 | Theory support (relevance of theory) | 10 | | |
| 3 | Comprehensive review (various perspectives) | 10 | | |
| 4 | Originality of the work | 15 | | |
| 5 | Novelty/innovation | 20 | | |
| 6 | Practicality (ease of use) | 15 | | |
| 7 | Product expediency/effectiveness | 20 | | |
| Sum | | 100 | | |
| Average value (end) | | | | |

Information:
 1= very lacking
 2= less
 3= enough
 4= good
 5= excellent

Jakarta,December 2020
 Appraiser,

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**ASSESSMENT SHEET
ATTITUDES/PERSONALITIES**

Study program :
Courses :
Semester :
Student name:
Tasks/products :
Assessment date :

| No | Assessed aspects | VALUE (1-5) |
|---------------|--------------------------|----------------|
| 1 | Notability/participation | |
| 2 | Honesty | |
| 3 | Discipline | |
| 4 | Tanggung jawab | |
| 5 | Collaborate | |
| AVERAGE VALUE | | |

Information:
1= very lacking
2= less
3= enough
4= good
5= excellent

Jakarta,December 2020
Appraiser,

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