Bengkulu University Semester Learning Plan (RPS) Based on OBE 2022

Semester Learning Plan (RPS) **Bengkulu University**		
Faculty	:	Teacher Training and Education
Study Program	:	Mathematics Education
Study Program Code	:	84202 Course
Name	:	Innovative Mathematics Learning
Course Code	:	PMAT - 203
Types of Courses	:	Compulsory
Credits Weight	:	Face to face: 2 credits, Practicum: 0 credits, Field Practice: 0 credits, Simulation: 0 credits
Learning Methods	:	*Case study, Team-Based Project,*
Semester	:	III (Odd)
Academic Year	:	2022 /2023
Lecturer	:	1. Nur Aliyyah Irsal, M.Pd
		2. Ratnah Lestary, M.Pd
Study Program Coordinator	:	Ringki Agustinsa, M.Pd
RPS Development Date	:	24 May 2022
CPMK Mathematics Learning Planning	:	In 16 face-to-face meetings , students are able to make mathematics lesson plans by applying one of the mathematics learning methods, and are able to relate it to Vygotsky's theory, and Piaget's theory in the development of children's cognition. Students are also able to review at least 3 journals related to mathematics learning theory and finally can make 1 article related to it.
Learning Outcomes (CP)		
A. **CPL-Prodi Charged to the Constitutional Court**	:	*Fill in according to the CPL that has been determined in the study program curriculum document for the courses prepared in accordance with the CPL in the form of S=Attitude, P=Knowledge, KU=General Skills, and KK=Special Skills .*
1. CPL-1 (S9)	:	Demonstrates a responsible attitude towards work in his area of expertise independently.
2. CPL-2 (P1)	:	Mastering the pedagogic-didactic concepts of mathematics to carry out learning in primary and secondary education oriented to 6C (*Creative, Critical thinking, Collaboration, Communication, Compassion and Computational Thinking*)
3. CPL-3 (P3)	:	Mastering the principles and planning, implementation, and evaluation techniques for mathematics learning
4. CPL-4 (KU1)	:	Able to apply logical, critical, systematic, innovative thinking or 6C (Creative, Critical thinking, Collaboration, Communication, Compassion and Computational Thinking) according to science.
5. CPL-5(KK1)	:	Able to plan, implement, and evaluate innovative mathematics learning according to science and have 6C character (Creative, Critical thinking, Collaboration, Communication, Compassion and Computational Thinking)
B. **Course Learning Outcomes (CPMK)**	:	*Content according to CPL - Study programs that are associated with courses and end with a code that refers to the CPL, for example [CPL-1]. Pay attention to using words that start with the word 'able' and continue with operational verbs. Avoid non-operational/action verbs, such as: 'understand', 'understand', and learn'.*
1. CPMK1	:	Able to explain mathematics learning methods and apply them in making lesson plans, scenarios and mathematics teaching materials for SMP/SMA levels **[CPL-1, CPL-2, CPL-3, CPL-4]**

2. CPMK2	:	Able to explain Vygotsky's theory of cognitive development children and apply it in planning mathematics learning **[CPL-1, CPL-2, CPL-3, CPL-5]**
3. CPMK3	:	Able to explain Piaget's theory of children's cognitive development and apply it in planning mathematics learning **[CPL-1, CPL-2, CPL -3, CPL-5]**
C. **Final Ability of Each Stage of Learning (Sub-CPMK)**		*Content according to the ability that will be accepted by students in certain subjects and ends with giving a code that refers to CPL and CPMK for example [CPMK-4] or can contain the word Affective work-1 (A-1). Pay attention to using words that start with the word 'able' and continue with operational verbs. Avoid non-operational/action verbs, such as: 'understand', 'understand', and learn'.*
1. Sub-CPMK1	:	Able to explain Bloom's Taxonomy and Learning Indicators **(CPMK1)**
2. Sub-CPMK2	:	Able to explain the difference between learning with inductive and deductive reasoning **(CPMK1)**
3. Sub-CPMK3	:	Able to explain the meaning and steps and application of *problem solving* **(CPMK1)**
4. Sub-CPMK4	:	Able to explain the meaning and steps and application of investigation and exploration learning methods **(CPMK1)**
5. Sub-CPMK5	:	Able to explain the meaning and steps and application of inquiry learning methods **(CPMK1)**
6. Sub-CPMK6	:	Able to explain the meaning and the steps and application of innovative learning methods **(CPMK1)**
7. Sub-CPMK7	:	Able to explain the theory of ZPD in learning **(CPMK2)**
8. Sub-CPMK8	:	Able to explain the theory of the period of cognitive development of Vygotsky children in learning **(CPMK2)**
9. Sub-CPMK9	:	Able to explain Piaget's theory of cognitive and social development of children **(CPMK3)**
10. Sub-CPMK10	:	Able to explain Piaget's theory of children's intellectual development and its implications for school learning **(CPMK3)**
11. Sub-CPMK11	:	Able to explain the psychological differences between Vygotsky and Piaget's learning theories **(CPMK3)**
Correlation of CPMK to Sub-CPMK		
1. CPMK1	:	Sub-CPMK1, Sub-CPMK2, Sub-CPMK3, Sub-CPMK4, Sub-CPMK5, Sub-CPMK6
2. CPMK2	:	Sub-CPMK7, Sub-CPMK8
3. CPMK3	:	Sub-CPMK9, Sub -CPMK10, Sub-CPMK11
Short Course Description	:	This course describes learning methods and learning theories that underlie mathematics learning planning in schools.
Learning Materials or Study Materials in	:	*Write down the learning materials that will be studied by students in the order of Sub-CPMK. Write the learning materials in English as well.*
1. Meeting 1	:	Bloom's Taxonomy; Three-Stage Teaching Model : Planning-Teaching-Evaluation
2. Meeting 2	:	Problem Solving
3. Meeting 3	:	*Hands-on activity; Realistic Mathematics Education*
4. Meeting 4	:	Inquiry Learning; *Guided Discovery Learning*
5. Meeting 5	:	Feedback Techniques; Task-Based Interviews; Advanced Questioning Strategy : *Probing* and *Prompting;* Strategies to motivate students to ask questions: *Problem Posing*
6. Meeting 6	:	Zone Proximal Development
7. Meeting 7	:	Vygotsky's Theory of Cognitive Development
8. Meeting 8	:	UTS: Projects to make lesson plans, scenarios, school mathematics teaching materials
9. Meeting 9	:	Piaget's Theory of Cognitive and Social Development
10. Meeting 10	:	Developmental Theory Children's Intellectuals and Its Implications for Piaget's School Learning
11. Meeting 11	:	Psychological Differences in Vygotsky and Piaget's Learning Theories

12. Meeting 12	:	Reviewing at least 3 Journals on learning planning and the underlying learning theory
13. Meeting 13	:	Class discussion on the results of the review at meeting 12
14. Meeting 14	:	Brainstorming in class about the idea of making learning planning articles in accordance with the theory and or the underlying method.
15. Meeting 15	:	The project of making articles on planning and implementing mathematics learning in accordance with learning theory.
16. Meeting 16	:	UAS: Article submitted to JP2MS
Reference Source or Library	:	
1. Main Library	:	[1] Bruning, RH, Schraw, GJ and Ronning, RR 1991. *Cognitive Psychology and Instruction*. USA : Prentice Hall. [2] Kozulin, A., Gindis, B., Ageyev, VS and Miller, SM 2003. *Vygotsky's Educational Theory in Cultural Context*. New York : Cambridge [3] Slavin, RE. 2006. *Educational Psychology Theory and Practice*. Eight Editions. New York : Pearson Education, Inc [4] Anonymous. *Piaget's Social Theory*. [5] Simatwa, EMW. 2010. Piaget's theory of intellectual development and its implications for instructional management at presecondary school level. *Educational Research and Reviews* Vol. 5(7), pp. 366-371 [6] Dahl, B. *A Synthesis Of Different Psychological Learning Theories? - Piaget and Vygotsky*. Norwegian University of Science and Technology, Trondheim.
2. Supporting Literature	:	[7] Barry, K., & King, L. (2006). Beginning Teaching and Beyond (3th ed.). Australia: Thomson/Social Science Press. [8] Jacobsen, DA, Eggen, P., & Kauchak, D. (2009). Methods for Teaching : Teaching Methods Improves Kindergarten - High School Student Learning (8th ed.). (A. Fawaid, & K. Anam, Trans.) Yogyakarta: Student Library. [9] Sonnabend, T. (2010). Mathematics for Teachers : An Interactive Approach for Grades K-8 (4th ed.). Canada: Brooks/Cole Cengage Learning.
Learning Media	:	
1. Software	:	Powerpoint, LMS Bengkulu University at https://elearning.unib.ac.id/
2. Hardware	:	Laptop, whiteboard, LCD and screen
Learning Method	:	*Case study, Team-Based Project*

Steps or Plans Learning Activities Every

Week	**Ability End of Each Learning Stage (Sub-CPMK)**	**Assessment**		**of Learning Forms, Learning Methods, Student Assignments [Time Estimation]**		**Learning Materials [Library]**	**Assessment Weight (%)**
		Indicators	and Techniques	Offline (*Offline*)	Online (*Online*)		

1	Introduction: Lecture contract and explanation of RPS **Sub-CPMK1** Able to explain Bloom's Taxonomy and Learning Indicators **(CPMK1)** **Sub-CPMK2** Able to explain differences in learning with inductive and deductive reasoning **(CPMK1)**	1. Able to explain Bloom's taxonomy 2. Able to determine indicators that are in accordance with SMART principles and refer to Bloom's taxonomy 3. Able to explain 3 stages of teaching 4. Able to explain differences in learning with inductive and deductive reasoning	1. Criteria : a) guidelines for assessing case analysis making measurable indicators 2. Techniques: a) oral test	**a. Lecture** **b. Learning Process** using*case method*Assignment [PB: 1X(2X50')] **c. :**Task **1** 1. Case analysis of making measurable indicators in a lesson plan 2. Analysis of mathematics learning flow cases [PT: 1x(2x60')] (BM: 1x(2x60')]	**Assignment** of case analysis of making measurable indicators in a lesson plan and case of mathematics learning flow through LMS University of Bengkulu at https://elearning.unib.ac.id/	Material: Bloom's Taxonomy, SMART, Stages of Teaching Pustaka: [7] hlm -	3
2	**Sub-CPMK3** Able to explain the meaning and steps and application of *problem solving* **(CPMK1)**	1. Able to explain the meaning and steps as well as the application of *problem solving*	1. Criteria: a) guidelines for assessing presentations and completing written assignments 2. Techniques: a) group presentations ; b)	**a. Lecture** **b. Learning Process** using Team Based Project method [PB: 1X(2X50')] **c. Assignment**: **Task 2** 1. Project to develop theme, topic, and presentation title [PT: 1x(2x60')] (BM: 1x(2x60')]	**Assignment :** make summary of lecture material through LMS Bengkulu University at https://elearning.unib.ac.id/ and make a ppt of the material to be presented	Material: Problem Solving Method Library: [8] pp. -	5
3	**Sub-CPMK4** Able to explain the meaning and steps as well as the application of the investigation and exploration learning method **(CPMK1)**	1. Able to explain the meaning and steps as well as the application of the *Hands-on activity learning method;* 2. Able to explain the	1. Criteria: a) guidelines for assessing presentations and completing written assignments 2. Techniques: a) group presentations ; b)	**a. Lecture** **b. Learning Process** using Team Based Project method [PB: 1X(2X50')] **c. Assignment**: **Task 3** 1. Project to arrange theme,	**Assignment :** make summary of lecture material through LMS Bengkulu University at https://elearning.unib.ac.id/ and make a ppt of the	Material: Investigation and Exploration Methods Library: [8] p. -	5

		meaning and steps as well as the application of *Realistic Mathematics Education*		topic, and presentation title [PT: 1x(2x60')] (BM: 1x(2x60')]	material to be presented		
4	**Sub-CPMK5** Able to explain the meaning and steps and application of inquiry learning method **(CPMK1)**	1. Able to explain understanding and steps and application of inquiry learning method 2. Able to explain understanding and steps and application of *Guided Discovery Learning*	1. Criteria: a) guidelines for assessing presentations and completing written assignments 2. . Techniques: a) group presentations ; b)	**a. Lecture** **b. Learning Process** using Team Based Project method [PB: 1X(2X50')] **c. Assignment: Task 4** 1. Project to arrange theme, topic, and presentation title [PT: 1x(2x60')] (BM: 1x(2x60')]	**Assignment :** make summary of lecture material through LMS Bengkulu University at https://elearning.unib.ac.id/ and make ppt of the material to be presented	Material: Inquiry Method, *Guided Discovery Learning* Library: [8] pp. -	5
5	**Sub-CPMK6** Able to explain the meaning and steps and application of innovative learning methods **(CPMK1)**	1. Able to apply feedback in lesson planning; 2. Able to explain the meaning and steps as well as the application of task-based interview learning methods; 3. Able to explain the meaning and steps as well as the application of *Probing* and *Prompting learning methods;* 4. Able to explain the meaning and steps as well	1. Criteria: a) guidelines for assessing presentations and completing written assignments 2. Techniques: a) group presentations ; b)	**a. Lecture** **b. Learning Process** using Team Based Project method [PB: 1X(2X50')] **c. Assignment: Task 5** 1. Project to arrange theme, topic, and presentation title [PT: 1x(2x60')] (BM: 1x(2x60')]	**Assignment :** make summary of lecture material through LMS Bengkulu University at https://elearning.unib.ac.id/ and make ppt of the material to be presented	Materials: Feedback, task-based interviews, *Probing* and *Prompting, Problem Posing*. Libraries: [8] p. -	5

		as the application of the *Problem Posing*					
6	**Sub-CPMK7** Able to explain ZPD theory in learning **(CPMK2)**	1. Able to explain ZPD theory and its relation to mathematics learning	1. Criteria: a) guidelines for assessing presentations and completing written assignments 2. Techniques: a) group presentations ; b)	**a. Lecture** **b. Learning Process** with Team Based Project method [PB: 1X(2X50')] **c. Assignment: Task 6** 1. Project to develop theme, topic, and presentation title [PT: 1x(2x60')] (BM: 1x(2x60')]	**Assignment :** make summary of lecture material through LMS Bengkulu University at https://elearning.unib.ac.id/ and make a ppt of the material to be presented	Material: ZPD Pustaka: [2] pp. 39 - 59	5
7	**Sub-CPMK8** Able to explain the theory of Vygotsky's child's cognitive development period in learning **(CPMK2)**	1. Able to explain the theory of Vygotsky's child's cognitive development period in mathematics learning	1. Criteria: a) guidelines for assessing presentations and completing written assignments 2. Techniques: a) group presentations ; b)	**a. Lecture** **b. Learning Process** using the Team Based Project method [PB: 1X(2X50')] **c. Assignment: Task 7** 2. Project to develop themes, topics, and presentation titles [PT: 1x(2x60')] (BM: 1x(2x60')]	**Assignment :** make summary of lecture material through LMS Bengkulu University at https://elearning.unib.ac.id/ and make a ppt of the material for presentation	Material: Periods in Child Development: Vygotsky's Perspective Library: [2] p. 119 - 136	5
8	UTS/Middle Semester Exam: Projects to make lesson plans, scenarios, teaching materials for school mathematics						20
9	**Sub-CPMK9** Able to explain Piaget's theory of children's cognitive and social development **(CPMK3)**	1. Able to explain Piaget's theory of children's cognitive and social development and its application	1. Criteria: a) guidelines for assessing presentations and completing written assignments 2. Techniques: a) group	**a. Lecture** **b. Learning Process** using the Team Based Project method [PB: 1X(2X50')] **c. Assignment: Task 8**	**Assignment :** make summary of lecture material through LMS Bengkulu University at https://elearning.unib.ac.i	. Material: Piaget's View on Cognitive Development, Piaget's Social Theory Perspective Library:	5

		in learning mathematics	presentations ; b)	1. Projects develop themes, topics, and presentation titles [PT: 1x(2x60')] (BM: 1x(2x60')]	d/ and make a ppt of the material for presentation	[3] p. 29 - 61 [4] pp. All	
10	**Sub-CPMK10** Able to explain Piaget's theory of children's intellectual development and its implications for school learning **(CPMK3)**	1. Able to explain Piaget's theory of children's intellectual development and its implications for school mathematics learning	1. Criteria: a) guidelines for assessing presentations and completing written assignments 2. Techniques: a) group presentations ; b)	**a. Lecture** **b. Learning Process** using Team Based Project method [PB: 1X(2X50')] **c. Assignment**: **Task 9** 1. Project to arrange theme, topic, and presentation title [PT: 1x(2x60')] (BM: 1x(2x60')]	**Assignment :** make summary of lecture material through LMS Bengkulu University at https://elearning.unib.ac.id/ and make a ppt of the material for presentation	. Material: Piaget's theory of intellectual development and its implications for instructional management at preseconda ry school level Pustaka: [5] pp. -	5
11	**Sub-CPMK11** Able to explain the psychological differences between Vygotsky and Piaget's learning theories **(CPMK3)**	1. Able to explain the psychological differences between Vygotsky and Piaget's learning theories in the application of school mathematics learning	1. Criteria: a) guidelines for assessing presentations and completing written assignments 2. Techniques: a) group presentations ; b)	**a. Lecture** **b. Learning Process** using the Team Based Project method [PB: 1X(2X50')] **c. Assignment**: **Task 10** 1. Projects develop themes, topics, and presentation titles [PT: 1x(2x60')] (BM: 1x(2x60')]	**Assignment :** make summary of lecture material through LMS Bengkulu University at https://elearning.unib.ac.id/ and make a ppt of the material to be presented	Material: A Synthesis Of Different Psychological Learning Theories? -Piaget and Vygotsky Libraries: [6] p. -	5
12	**Sub-CPMK1 - Sub-CPMK11**	1. Able to review at least 3 journals related to Piaget's and/or Vygotsky's theory of	1. Criteria: a) journal review assessment guidelines 2. Techniques: a) write	**a. lecture** **b. Learning Process** using Team Based Project method	**Assignment :** making review articles through University LMS Bengkulu at	Materials: Piaget's Cognition Theory, Vygotsky's Cognition Theory,	5

		cognition in school mathematics learning and mathematics learning methods		[PB: 1X(2X50')] **c. Assignment: Task 11** 1. Project writing review articles [PT: 1x(2x60')] (BM: 1x(2x60')]	https://elearning.unib.ac.id/	Mathematics Learning Methods [1]-[9]	
13	**Sub-CPMK1 - Sub-CPMK11**	1. Able to review at least 3 journals related to Piaget's and/or Vygotsky's cognitive theory in school mathematics learning and mathematics learning methods	1. Criteria: a) presentation assessment guidelines 2. Techniques: a) group presentation	**a. Lecture** **b. Learning Process** using the Team Based Project method [PB: 1X(2X50')] **c. Assignment: Task 12** 1. Project compiling a summary of the results of class discussions [PT: 1x(2x60')] (BM: 1x(2x60')]	**Assignment :** summarizing lecture material through LMS Bengkulu University at https://elearning.unib.ac.id/ and make ppt of the material to be presented	Materials: Piaget's Cognition Theory, Vygotsky's Cognition Theory, Mathematics Learning Methods [1]-[9]	3
14	**Sub-CPMK1 - Sub-CPMK11**	1. Able to determine the problem formulation of the mini research to be carried out	1. Criteria : a) technical problem formulation 2. : a) writing lecture article	**a. outlines** **b. Learning Process** using Team Based Project method [PB: 1X(2X50')] **c. Assignment : Task 13** 1. Brainstorming [PT: 1x(2x60')] (BM: 1x(2x60')]	**Assignment** of discussion between groups and lecturers and making a summary of lecture material through LMS Bengkulu University at https://elearning.unib.ac.id/	Materials: Piaget's Cognition Theory, Vygotsky's Cognition Theory, Mathematics Learning Methods [1]-[9]	4
15	**Sub-CPMK1 - Sub-CPMK11**	1. Able to do mini research with the output of innovative mathematics learning articles in	1. Criteria: a) conformity with the journal format in jp2ms 2. Techniques: a) writing	**a. lecture** **b. Learning Process** using Team Based Project method [PB: 1X(2X50')]	**Assignment** of article creation through LMS Bengkulu University at https:	Materials: Piaget's Cognition Theory, Vygotsky's Cognitive Theory, Mathematic	10

		jp2ms format		**c. Assignment : Task 14** 1. Article writing [PT: 1x(2x60')] (BM: 1x(2x60')]	//elearning.unib.ac.id/	s Learning Methods [1]-[9]	
16.	Final Semester Final Examination: Conducting mini research with the output of innovative mathematics learning articles and submit in jp2ms						10
Total Score							**100**

Evaluation Plan Evaluation

Base	:	**Component**	**Weight (%)**	**Description (Indonesian)**	**Description (English)**
1. Participatory Activities	:	Observation of Student Activities (Case Method)	3%	Assess students' ability to check and the accuracy of making indicators Provide reinforcement for indicators that are already appropriate and/or provide suggestions for improvement if those indicators are not correct	Assessing students' ability to check and the accuracy of making learning indicators Provide reinforc ement to indicators that are already appropriate and/or provide suggestions for improvement if these indicators are not appropriate.
2. Results	:	Project Results	%	presented.	Reports in the form of material papers
3. Project	.	50	Reports	papers	presentedarticles from innovative mathematics learning mini research
		2. Quiz	-	-	-
		3. Middle Semester Exam (UTS)	20 %	Projects	making lesson plans, scenarios, school mathematics teaching materials Projects for making lesson plans, scenarios, school mathematics teaching materials
		4. Final Semester Exams (UAS)	10 %	Submitted articles to jp2ms	Submitted articles to jp2m
		Total Score	**100**		

Student

1. Activities Student Activities Meeting 1		
a. Type of Activity	**:**	Case study
b. Activity Title	**:**	Analyzing editorial indicators in a lesson plan

c. Location of Activity	:	Class in Lecture Building 3 FKIP Unib LMS Bengkulu University in *https://elearning.unib.ac.id/*
d. Implementation Date	:	Adjusted to the meeting schedule
e. SK Number Task	:	-
f. SK date Assignment	:	-
g. Member Type	:	Independent
h. Activity ID	:	-
i. Activity Steps	:	Understanding the given case Observing data for case solving Case analysis Writing the results of case analysis Discussion in class Drawing conclusions in class Collecting analysis results Assessment
j. Indicators	:	Case analysis a. Accuracy explains Bloom's taxonomy, stages and teaching. b. Accuracy in linking the SMART concept to the given case
k. Assessment Criteria	:	Case Analysis Criteria: Exactly explains Inaccurate in in explaining
l. Rating Weight	:	Case Analysis Criteria: Exactly explains : Weight 2 Inaccurate in explaining : Weight 1 Inaccurate in explaining : Weight 0
m. Reference List /List of References	:	[7] Barry, K., & King, L. (2006). Beginning Teaching and Beyond (3th ed.). Australia: Thomson/Social Science Press.
2. Student Activities Meetings 2, 3, 4, 5, 6, 7, 9, 10, 11		
a. Type of Activity	:	Team Based Project
b. Activity Title	:	Presentation of the study of innovative mathematics learning materials
c. Activity Location	:	Class in Lecture Building 3 FKIP Unib LMS Bengkulu University at *https ://elearning.unib.ac.id/*
d. Implementation Date	:	Adjusted to the meeting schedule
e. SK Number Assignment	:	-
f. Date of SK Task	:	-
g. Type of Member	:	Small group
h. Activity ID	:	-
i. Activity Steps	:	Group formation Preparation of study material as presentation material project-based Presentation and class discussion Drawing conclusions together

j. Assessment Indicators	:	1. Project Assessment a. Accuracy in explaining the concept of innovative mathematics learning b. Accuracy in linking learning methods or theory of cognition to the selected project
k. Assessment Criteria	:	1. Project Assessment Criteria: Exactly explaining Less precise in explaining Inaccurately explaining
l. Rating Weight	:	1. Project Assessment Criteria: Exactly explains : Weight 2 explains : Weight 1 explains : Weight 0
m. Reference List/List of References		1] Bruning, RH, Schraw, GJ and Ronning, RR 1991. *Cognitive Psychology and Instruction*. USA : Prentice Hall. [2] Kozulin, A., Gindis, B., Ageyev, VS and Miller, SM 2003. *Vygotsky's Educational Theory in Cultural Context*. New York : Cambridge [3] Slavin, RE. 2006. *Educational Psychology Theory and Practice*. Eight Editions. New York : Pearson Education, Inc [4] Anonymous. *Piaget's Social Theory*. [5] Simatwa, EMW. 2010. Piaget's theory of intellectual development and its implications for instructional management at presecondary school level. *Educational Research and Reviews* Vol. 5(7), pp. 366-371 [6] Dahl, B. *A Synthesis Of Different Psychological Learning Theories? - Piaget and Vygotsky*. Norwegian University of Science and Technology, Trondheim. 7] Barry, K., & King, L. (2006). Beginning Teaching and Beyond (3th ed.). Australia: Thomson/Social Science Press. [8] Jacobsen, DA, Eggen, P., & Kauchak, D. (2009). Methods for Teaching : Teaching Methods Improves Kindergarten - High School Student Learning (8th ed.). (A. Fawaid, & K. Anam, Trans.) Yogyakarta: Student Library. [9] Sonnabend, T. (2010). Mathematics for Teachers : An Interactive Approach for Grades K-8 (4th ed.). Canada: Brooks/Cole Cengage Learning
3. Student Activities Meeting 12, 13		
a. Activity Type	:	Team Based Project
b. Activity Title	:	Journal Review
c. Location of Activity	:	Class in Lecture Building 3 FKIP Unib LMS Bengkulu University at *https://elearning.unib.ac.id/*
d. Implementation Date	:	Adjusted to the meeting schedule
e. SK Number Assignment	:	-
f. Date of SK Task	:	-
g. Type of Member	:	Small group
h. Activity ID	:	-
i. Activity Steps	:	Group formation Journal collection Journal review Class discussion: exchange of information on the results of the review
j. Assessment Indicators	:	1. Project Assessment a. Accuracy in explaining the concept of innovative mathematics learning b. Accuracy in linking learning methods or theory of cognition to the chosen journal topic

k. Assessment Criteria	:	1. Project Assessment Criteria: Exactly explaining Less precise in explaining Inaccurately explaining
l. Rating Weight	:	1. Project Assessment Criteria: Exactly explains : Weight 2 explains : Weight 1 explains : Weight 0
m. Reference List/List of References		1] Bruning, RH, Schraw, GJ and Ronning, RR 1991. *Cognitive Psychology and Instruction*. USA : Prentice Hall. [2] Kozulin, A., Gindis, B., Ageyev, VS and Miller, SM 2003. *Vygotsky's Educational Theory in Cultural Context*. New York : Cambridge [3] Slavin, RE. 2006. *Educational Psychology Theory and Practice*. Eight Editions. New York : Pearson Education, Inc [4] Anonymous. *Piaget's Social Theory*. [5] Simatwa, EMW. 2010. Piaget's theory of intellectual development and its implications for instructional management at presecondary school level. *Educational Research and Reviews* Vol. 5(7), pp. 366-371 [6] Dahl, B. *A Synthesis Of Different Psychological Learning Theories? - Piaget and Vygotsky*. Norwegian University of Science and Technology, Trondheim. 7] Barry, K., & King, L. (2006). Beginning Teaching and Beyond (3th ed.). Australia: Thomson/Social Science Press. [8] Jacobsen, DA, Eggen, P., & Kauchak, D. (2009). Methods for Teaching : Teaching Methods Improves Kindergarten - High School Student Learning (8th ed.). (A. Fawaid, & K. Anam, Trans.) Yogyakarta: Student Library. [9] Sonnabend, T. (2010). Mathematics for Teachers : An Interactive Approach for Grades K-8 (4th ed.). Canada: Brooks/Cole Cengage Learning
4. Student Activities Meeting 14, 15		
a. Type of Activity	:	Team Based Project
b. Activity Title	:	Mini Research
c. Location of Activity	:	Class in Lecture Building 3 FKIP Unib LMS Bengkulu University at *https://elearning.unib.ac.id/*
d. Implementation Date	:	Adjusted to the meeting schedule
e. SK Number Tasks	:	-
f. Date of SK Task	:	-
g. Type of Member	:	Small group
h. Activity ID	:	-
i. Activity Steps	:	Group formation Brainstorm article ideas Data collection Writing results in the form of articles in jp2ms format Submitted to jp2ms
j. Assessment Indicators	:	1. Project Assessment a. Accuracy in explaining the concept of innovative mathematics learning b. Accuracy in linking learning methods or theory of cognition to the chosen journal topic
k. Assessment Criteria	:	1. Project Assessment Criteria: Exactly explaining

		Less precise in explaining Inaccurately explaining
l. Rating Weight	:	1. Project Assessment Criteria: Exactly explains : Weight 2 explains : Weight 1 explains : Weight 0
m. Reference List/List of References		1] Bruning, RH, Schraw, GJ and Ronning, RR 1991. *Cognitive Psychology and Instruction*. USA : Prentice Hall. [2] Kozulin, A., Gindis, B., Ageyev, VS and Miller, SM 2003. *Vygotsky's Educational Theory in Cultural Context*. New York : Cambridge [3] Slavin, RE. 2006. *Educational Psychology Theory and Practice*. Eight Editions. New York : Pearson Education, Inc [4] Anonymous. *Piaget's Social Theory*. [5] Simatwa, EMW. 2010. Piaget's theory of intellectual development and its implications for instructional management at presecondary school level. *Educational Research and Reviews* Vol. 5(7), pp. 366-371 [6] Dahl, B. *A Synthesis Of Different Psychological Learning Theories? - Piaget and Vygotsky*. Norwegian University of Science and Technology, Trondheim. 7] Barry, K., & King, L. (2006). Beginning Teaching and Beyond (3th ed.). Australia: Thomson/Social Science Press. [8] Jacobsen, DA, Eggen, P., & Kauchak, D. (2009). Methods for Teaching : Teaching Methods Improves Kindergarten - High School Student Learning (8th ed.). (A. Fawaid, & K. Anam, Trans.) Yogyakarta: Student Library. [9] Sonnabend, T. (2010). Mathematics for Teachers : An Interactive Approach for Grades K-8 (4th ed.). Canada: Brooks/Cole Cengage Learning

Portfolio of Assessment and Evaluation of Student

Week		CPL	CPMK (CLO)	Sub-CPMK (LLO)	Indicator	Form of Questions	Weight of %	Weight (%) Sub-CPMK Student	Grades (0-100)	()x(Weight %)	Achievement of CPL in MK (%)
1	:	CPL-2 CPL-3	**CPMK1**	Sub-CPMK1 Sub-CPMK2	1, 2, 3, 4	Task 1: non test	3	3	…	…	…
2	:	CPL-2 CPL-3	**CPMK1**	Sub-CPMK3	1	Task 2: non test	5	5	…	…	…
3	:	CPL-2 CPL-3	**CPMK1**	Sub-CPMK4	1, 2	Task 3: non test	5	5	…	…	…
4	:	CPL-2 CPL- 3	**CPMK1**	Sub-CPMK5	1, 2	Task 4: non test	5	5	…	…	…
5	:	CPL-2 CPL-3	**CPMK1**	Sub-CPMK6	1, 2, 3, 4	Task 5: non test	5	5	…	…	…

6	:	CP L -2 CP L-3	**CPM K2**	Sub-CP MK7	1	non test	5	5	…	…	:
7	:	CP L-2 CP L-3	**CPM K2**	Sub-CP MK8	1	Task 7: non test	5	5	…	…	:
8	-	Semester Exam (UTS); Weight : 20%									
9	:	CP L-2 CP L-3	**CPM K3**	Sub-CP MK9	1	Task 8: non test	5	5	…	…	…
10	:	CP L-2 CP L-3	**CPM K3**	Sub-CP MK10	1	Task 9: non test	5	5	…	…	…
11	:	CP L-2 CP L-3	**CPM K3**	Sub-CP MK11	1	Task 10: non test	5	5	…	…	…
12	:	CP L-2 CP L-3	**CPM K1 - CPM K3**	Sub-CP MK1 - Sub-CP MK11	1	Task 11: non test	5	5			
13	:	CP L-2 CP L-3	**CPM K1 - CPM K3**	Sub-CP MK1 - Sub-CP MK11	1	Task 12: non test	3	3			
14	:	CP L-2 CP L-3	**CPM K1 - CPM K3**	Sub-CP MK1 - Sub-CP MK11	1	Task 13: non test	4	4			
15	:	CP L-2 CP L-3	**CPM K1 - CPM K3**	Sub-CP MK1 - Sub-CP MK11	1	Task 14 non-test	10	10			
16	:	Final Semester Examination (UAS); Score: 10%									
Total Weight	:						100	100			
Final Student Score (∑(Student Score)x(Weight%))	:								…		

Assessment of CPL Achievement in Subject

No.	CPL in the Course	of Achievement Value (0-100) Achievement	of CPL in MK
1.	CPL1 (S9): Demonstrates an attitude of being responsible for work in his field of expertise independently.	…	…
2.	CPL2 (P1): Mastering the pedagogic-didactic concepts of mathematics to carry out learning	…	…

	in primary and secondary education oriented to 6C (*Creative, Critical thinking, Collaboration, Communication, Compassion and Computational Thinking*)		
3.	CPL3 (P1): Mastering the principles and techniques of planning, implementing, and evaluating mathematics learning	…	…
4.	CPL4 (KU1): Able to apply logical, critical, systematic, innovative thinking or 6C (Creative, Critical thinking, Collaboration, Communication, Compassion and Computational Thinking) according to science		
5.	CPL4 (KK1): Able to plan, implement, and evaluate mathematics learning innovatively according to science and 6C character (Creative, Critical thinking, Collaboration, Communication, Compassion and Computational Thingking)	…	…
	Number of CPL Achievers	…	…

Student Success Qualifications Based on Bengkulu University Rector's Regulation Number 25 of 2020 Article 44

No.	Value Range	Letter	Weight
1.	85 – 100	A	4
2.	80 – 84	A-	3,75
3.	75 – 79	B+	3,5
4.	70 – 74	B	3
5.	65 – 69	B-	2,75
6.	60 – 64	C+	2,5
7.	55 – 59	C	2
8.	45 – 54	D	1
9.	0-44	E	0