CODE OF SUBJECT LESSON : PMA209

SUBJECT LESSON : Ethnomathematics

DESCRIPTION :
The subject related to the willingness, attitude, knowledge, skill and experience of the reviewing and developing mathematics education based on multi ethnic and culture.

Lecture : Dr. Marsigit, MA

Standard Competence	Outcome
1. To identify and uncover mathematics of different ethnic and culture	1. To characterize mathematics of different ethnic and culture 2. To characterize the ground of mathematics of different ethnic and culture 3. To characterize the pattern and the dread of mathematics of different ethnic and culture
2. To develop ethnic and culture based mathematics	1. To develop mathematics of its own ethnic and culture 2. To review the possibility and the potentiality of mathematics of its own ethnic and culture to be contributed to mathematics education development
3. To develop ethnic and culture based mathematics education	1. To develop teaching and learning resources for ethnic and culture based mathematics teaching and learning processes. 2. To develop teaching materials for ethnic and culture based mathematics teaching and learning processes
4. To implement ethnic and culture based mathematics education	1. To develop mathematical attitude for ethnic and culture based mathematics education 2. To develop mathematical method for ethnic and culture based mathematics education 3. To develop mathematical content for ethnic and culture based mathematical education .

Variables Definition:

Ethnomathematics consists of the following aspects of variable:
1. Mathematics in a certain ethnic and culture, 2. The enculturizatio of mathematics, 3. The context of Mathematics Education, 4. Ethnomathematics and Mathematics Education, 5. Developing ethnic and culture based Mathematics Education.

Assignment covers:

1. Identifying mathematics and mathematics education of various ethnic and culture
2. Characterizing mathematics and mathematics education of various ethnic and culture
3. Developing mathematics and mathematics education of its own ethnic and culture

Evaluation:

Oral Test
Presentation
Developing Scientific Papers
Mid Semester Evaluation
Final Evaluation

Reference:

1. Ascher, M. (1991). *Ethnomathematics: A multicultural view of mathematical ideas.* New York: Chapman and Hall.
2. Ascher, M. (1995). Models and maps from the Marshall Islands: A case in ethnomathematics. *Historia Mathematica*
3. Ascher, M., & D'Ambrosio, U. (1994). Ethnomathematics: A dialogue. *For the Learning of Mathematics*
4. Banks, J. A., & Banks, C. A. M. (1995). *Handbook of research on multicultural education.* New York: Macmillan.
5. Berry, J. W. (1985). Learning mathematics in a second language: Some cross-cultural issues. *For the Learning of Mathematics*
6. Bishop, A. J. (1988). *Mathematical enculturation: A cultural perspective on mathematics education.* Dordrecht, The Netherlands: Kluwer Academic Publishers.
7. Civil, M. (1995, July). *Connecting home and school: Funds of knowledge for mathematics teaching.* Paper presented in the working group on Cultural Aspects in the Learning of Mathematics, 19th International Conference for the Psychology of Mathematics Education, Recife, Brazil.

8. Cobb, P., Gravemeijer, K., Yackel, E., McClain, K., & Whitenack, J. (1997). Mathematizing and symbolizing: The emergence of chains of signification in one first-grade classroom. In D. Kirshner & J. A. Whitson (Eds.), *Situated cognition: Social, semiotic, and psychological perspectives* (pp. 151–233). Mahwah, NJ: Lawrence Erlbaum.