TQF. 3 Course Specification

Course Code : MTP5107

Course Title : Learning Management, Learning Resource, and Quality Assurance for Mathematics Education

Credits : 3(3-0-6)

Semester /Academic Year : 2/ 2015

Students : Master of Arts Program in Mathematics Education

Lecturers : Assoc.Prof. Chaweewan Kaewsaiha

Assoc.Prof. Tasanee Siriwan

Dr.Kanokrat Kunasaraphan

International College, Suan Sunandha Rajabhat University

Content

Section 1 General Information

1. Code and Course Title : MTP5107 Learning Management, Learning Resource, and Quality Assurance for Mathematics Education

2. Credits : 3(3-0-6)

3. Curriculum and Course Category :

This course of Master of Arts ,International College, SSRU is categorized in *Requirement Course: Cluster in International Teaching Profession* **.**

4. Lecturers:

Assoc.Prof. Chaweewan Kaewsaiha

Assoc.Prof. Tasanee Siriwan

Dr.Kanokrat Kunasaraphan

5. Year / Semester

Graduate Student Year 3 / Semester 2/2015

6. Prerequisite Course

None

7. Co-requisite Course :

None

8. Learning Location

Building Number **:** 21

Wednesday 13.00 – 16.00 Room No. 2122

9. Last Date for Preparing and Revising this Course:

July 15, 2015

Section 2 Objectives and Purposes

1. Course Objectives

At the end of this course, the student will be able to perform in the following areas of performance :

(1) Able to compile courses to formulate a learning plan for teaching mathematics ;

(2) Able to design a learning model appropriate to the learners' ages;

(3) Able to select, develop and produce media and instrument that promote learning;

(4) Able to organize activities that promote learning and classify the learners' levels based on evaluation.

(5) Able to manage learning resources and classroom environment for educational quality and standards.

(6) Able to prepare self-evaluation report of educational institutions in support of internal and external evaluation.

2. Purposes for Developing / Revising Course (content / learning process / assessment / etc.)

According to TQF (Thailand Quality Framework: HEd.) and the Teachers'Council of Thailand with the standards of professional knowledge and experience for requirement courses, graduate students program in mathematics education should have essence of knowledge in learning management, classroom management, and educational quality assurance as follows:

(1) Learning management, consisting of
- 1.1 Learning and teaching theories;
- 1.2 Learning models and instructional model development;
- 1.3 Design and management of learning experiences;
- 1.4 Integration of contents for learning groups;
- 1.5 Integration for group learning;

1.6 Techniques and know-how in learning management;
1.7 Media implementation and production and innovative development for learning;
1.8 Learner-oriented learning management;
1.9 Learning evaluation.

(1) Classroom management, consisting of:

2.1 Management theory and principles;
2.2 Educational leadership and teamwork;
2.3 Systematic thinking;
2.4 Learning of organizational culture;
2.5 Organizational human relations and communication;
2.6 Preparation and development academic programs and activities for educational institution and communities ;
2.7 Information system for management.

(3) Educational Quality Assurance, consisting of:

3.1 Principles and procedures for educational quality assurance;
3.2 Elements of educational quality assurance;
3.3 Educational standards;
3.4 Internal and external assurance;
3.5 Roles of administrators on the educational assurance.

Section 3 Course Structure

1. Course Outline

Principles, concepts and guidelines for developing learning plans; Learning resources and learning center; Planning for effective managing learning resources and environment for learning; Principles and models of learning management; Community-Based Learning and Problem-Based with critical, creative, and problem solving skills; Classroom management; Learner-oriented learning and Integration for inclusive learning*; Principles and procedures for educational quality assurance; Elements of educational quality assurance; Educational standards; Internal and external quality assurance; Roles of administrators on the educational quality assurance

Remark * Revised according to and the Teachers'Council of Thailand with the standards of professional knowledge and experience for requirement courses.

2. Time Length per Semester (Lecture – hours / Practice – hours / Self Study – hours)

Lecture	**Practice/ Field Work/Internship**	**Self Study**	Remedial Class
48 hours	-	96 hours	3+ (if any)

3. Time Length per Week for Individual Academic Consulting and Guidance

1 hour / week

Section 4 Developing Student's Learning Outcomes

Learning Standards/Outcomes	Learning Activities	Learning Assessment
1. Ethics and Morals To have ethic behavior (personal responsibility , corporate responsibility) and moral reasoning.	Work in group to discuss learning management, classroom management, and educational quality assurance; and their impact on teachers' skills and attitudes.	Group discussion Report
2. Knowledge (1) Be able to compile courses to formulate a learning plan for teaching mathematics. (2) Be able to design a learning model appropriate to the learners' ages; (3) Be able to select, develop and produce media and instrument that promote learning.	1. Introduce the effective teaching and learning strategies included learning resources in mathematics. 2. Have the students develop their plans to establish mathematics learning management plan .	1. Term papers 2. Group report presentation
3. Cognitive Skills (1) Be able to organize activities that promote learning and classify the learners' levels based on evaluation. (2) Able to manage learning resources and	1. Use research-based learning and internet-based learning to construct cognitive skills in solving mathematics classroom problems. 2. Discussion and presentation of research	1. Individual portfolio 2. Term papers 3. Group report presentation

Learning Standards/Outcomes	Learning Activities	Learning Assessment
classroom environment for educational quality and standards. (3) Able to prepare self-evaluation report of educational institutions in support of internal and external evaluation.	findings – students write reports, and other forms of work documentation to include in their portfolios or oral presentation their findings from discussion / searching information.	
4. Interpersonal Skills and Responsibilities 4.1 Have responsibility for assignment : select ideas in education from different theoretical perspectives, application to standards. 4.2 Can adjust to work in team both as leader or follower.	1. Use research-based learning and internet-based learning on socio-economic analysis of policy issues in education impact on learning management, classroom management, and educational assurance.. 2. Students work in group of five. They plan to use PBL technique to search information demonstrate interpersonal skills and responsibility in a variety of socio-economic analysis in educational policy making.	1. Term papers 2. Group report presentation
5. Numerical Analysis, Communication and Information Technology Skills 5.1 Have statistical and mathematical skills to	1. Use research-based learning and internet-based learning to analyze national policy about learning management, classroom management,	1. Individual portfolio 2. Term papers 3. Group

Learning Standards/Outcomes	Learning Activities	Learning Assessment
present research finding on learning management, classroom management , and educational quality assurance. 5.2 Can use correct language in oral and written presentations. 5.3 Can use computer and IT to follow the progress management in learning and classroom, and educational assurance.	and educational assurance imply to mathematics class. 2. Students work in group of five. They plan to use technology to analyze data and present their report both in oral and written.	report presentation
6. Learning Management Skills 6.1 Be able to design learning activities and learning environments within the context of a unit of mathematics and real world. 6.2 Be able to develop the learners with essential opportunities to enhance learning concepts and motivate active engagement in mathematical process for problem solving.	1. Use basic techniques for learning management skills: integration of contents for learning group, integration for group learning, and learner-oriented learning management. 2. Discussion and presentation of learning and teaching theories and research on the learning of mathematics, development of mathematical thinking and knowledge in school and other settings.	1. Individual portfolio 2. Term papers 3. Group report presentation

Section 5 Lesson Plan and Assessment

1. Lesson Plan

Week	Topic/Outline	Hours	Learning Activities and Medias
1-2	**Unit 1** The purpose, nature and scope of learning management, and classroom management.	6	1. Introduce the purpose, nature and scope of learning management and classroom management. 2. Students work with a group of five to discuss about the relevance of learning management and classroom management.
3	**Unit 2** Learning resources; Planning for effective managing learning resources and environment for learning	3	1. Introduce learning resources by emphasizing the importance of planning for effective management of learning resources and environment to the real situation. 2. Students work with a group of five to discuss about learning resources and environment.
4	**Unit 3** Types of learning resources: Learning materials, Learning projects	3	1. Introduce types of learning resources, materials and projects. 2. Students work with a group of five to discuss about selecting and designing

Week	Topic/Outline	Hours	Learning Activities and Medias
5	**Unit 4** Research projects; Types of learning environment: Virtual learning environment, Community-Based learning environment	3	1. Introduce research-based learning, project-based learning, and community-based learning. 2. Students discuss about real situation in learning mathematics by using research-based learning, project-based learning, and community-based learning.
6	**Unit 5** Problem-Based learning environment.	3	1. Introduce problem-based learning in mathematics. 2. Students discuss about how to establish project using problem-based learning environment.
7	**Mid-Term Examination**	3	**Paper-Test**
8-10	**Unit 6** Principles and procedures for educational quality assurance; Elements of educational quality assurance.	9	1. Introduce principles, procedures, and elements of educational assurance. 2. Students work in groups of five discuss about educational assurance.
11-13	**Unit 7** Educational standards; Internal and external quality assurance	9	1. Introduce educational standards; Internal and external quality assurance.

Week	Topic/Outline	Hours	Learning Activities and Medias
			2. Students work in groups of five discuss about educational standards; Internal and external quality assurance.
14-15	**Unit 8** Roles of administrators on the educational quality assurance.	6	1. Introduce roles of administrators on the educational quality assurance. 2. Case study of a guideline for administrators on the educational quality assurance..
16	**Final Examination**	3	**Paper-Test**
Total of Hours		**48**	

Remark : Reserve 1 – 2 weeks for searching related topics.

2. Learning Assessment Plan

Learning Outcomes	Assessment Activities	Time Schedule (Week)	Proportion for Assessment (%)
1. Ethics and Morals To have ethic behavior (personal responsibility , corporate responsibility) and moral reasoning.	1. Individual portfolio 2. Group discussion	Throughout semester	5 %
2. Knowledge (1) To compile courses to formulate a learning plan for teaching mathematics. (2) To design a learning model appropriate to the learners' ages; (3) To select, develop and produce media and instrument that promote learning.	1. Term papers 2. Group report presentation	Throughout semester	40 %
3. Cognitive Skills (1) To organize activities that promote learning and classify the learners' levels based on evaluation.	1. Individual portfolio 2. Term papers 3. Group report presentation	Throughout semester	30 %

Learning Outcomes	Assessment Activities	Time Schedule (Week)	Proportion for Assessment (%)
(2) To manage learning resources and classroom environment for educational quality and standards. (3) To prepare self-evaluation report of educational institutions in support of internal and external evaluation.			
4. Interpersonal Skills and Responsibilities 4.1 Have responsibility for assignment : select ideas in education from different theoretical perspectives, application to standards. 4.2 Can adjust to work in team both as leader or follower.	1. Checklists 2. Interviews	Throughout semester	5 %

Learning Outcomes	Assessment Activities	Time Schedule (Week)	Proportion for Assessment (%)
5. Numerical Analysis, Communication and Information Technology Skills 5.1 Have statistical and mathematical skills to present research finding on learning management, classroom management , and educational quality assurance. 5.2 Can use correct language in oral and written presentations. 5.3 Can use computer and IT to follow the progress management in learning and classroom, and educational assurance.	1. Individual portfolio 2. Term papers 3. Group report presentation	Throughout semester	10 %
6. Learning Management Skills 6.1 Be able to design learning activities and learning environments within the context of a	1. Individual portfolio 2. Term papers 3. Group report presentation	Throughout semester	10 %

Learning Outcomes	Assessment Activities	Time Schedule (Week)	Proportion for Assessment (%)
unit of mathematics and real world. 6.2 Be able to develop the learners with essential opportunities to enhance learning concepts and motivate active engagement in mathematical process for problem solving.			

Section 6 Learning and Teaching Resources

1. Textbook and Main Documents

Killen, R. (1996). *Effective teaching strategies: Lesson from research and practice*. Australia: Social Science Press.

Ministry of Education. (2008). *Manual for the internal quality assurance for higher education institutions*. Bangkok : Commission on Higher Education.

2. Important Documents for Extra Study

Briggs, Ann R.J. & Sommefeldt, D. (2003). *Managing effective learning and teaching*. London : Sage.

Jones, V. (2011). *Practical classroom management*. Boston : Pearson.

Matson, E. & Prusak, L.(2006).*Knowledge management and organizational learning*. Oxford : Oxford University Press.

3. Suggestion Information (Printing Materials/Website/CD/ Others)

Keywords for searching : learning management, classroom management, quality assurance.

Section 7 Course Evaluation and Revising

1. Strategies for Course Evaluation by Students

Using survey questions to collect information from the students' opinions to improve the course and enhance the curriculum. Examples of questions:

(1) Content objectives were made clear to the students.
(2) The content was organized around the objectives.
(3) Content was sufficiently integrated.
(4) Content was sufficiently integrated with the rest of the first year curriculum.
(5) The instructional materials used were effectively.
(6) The learning methods appropriate assessed the students' understanding of the content.
(7) Overall, Students are satisfied with the quality of this course .

…….. etc. ……

2. Strategies for Course Evaluation by Lecturer

2.1 Lecturers team observe the class and discuss the results as follow:

(1) The lecturer is well prepared for class sessions.
(2) The lecturer answers questions carefully and completely.
(3) The lecturer uses examples to make the materials easy to understand.
(4) The lecturer stimulated interest in the course.
(5) The lecturer made the course material interesting.
(6) The lecturer is knowledgeable about the topics presented in this course.
(7) The lecturer treats students respectfully.
(8) The lecturer is fair in dealing with students.
(9) The lecturer makes students feel comfortable about asking question.
(10) Course assignment are interesting and stimulating.
(11) The lecturer's use of technology enhanced learning in the classroom.

…….. etc. ……

1.2 The director / head of program construct assessment items to evaluate four dimensions of lecturer's competencies : teaching skills, organization and presentation of materials, management of the learning environment, and teaching attitudes.

3. Teaching Revision

Lecturer revises teaching / learning process based on the results from the students' survey questions , the lecturer team's observation, and classroom research.

4. Feedback for Achievement Standards

International College Administrator Committee monitor to assessment process and Grading.

5. Methodology and Planning for Course Review and Improvement

(1) Revise and develop course structure and process every two years.

(2) Assign different lecturers teach this course to enhance students' performance.