COURSE OUTLINE

Department & Faculty: Department of Science and Mathematics Education, Faculty of Education UTM	Page : 1 of 4
Course Code: PPS2403: Design and implementation of Chemistry Curriculum. Total Lecture Hours: 42 hours	Semester: 1 Academic Session: 2009/2010

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Synopsis :

Various models used in curriculum design in developing and develop world. Factors influencing curriculum design. Several examples of chemistry curricula (both primary and secondary) viewed in terms of contents, pedagogical and psychological aspects. Critical revision of the implementation of a particular curriculum model with particular focus on the intended and implemented curriculum.

LEARNING OUTCOMES

By the end of the course, students should be able to:

No.	Course Learning Outcome	Programme Learning Outcome(s) Addressed	Assessment Methods
1.	Discuss the rationale, philosophy and aims of chemistry education in school.	PO1, PO2	WA
2.	Explain the needs and innovation of chemistry curriculum.	PO1, PO2	WA
3.	Discuss issues and problems in teaching and learning chemistry in secondary school.	PO1, PO2, PO3	WA
4.	Discuss the implemented and intended chemistry curriculum in schools.	PO3, PO6,PO7	PR, WA
5.	Compare the chemistry curriculum overseas with chemistry KBSM curriculum	PO2, PO3,PO5, PO6	PR, WA
6.	Increase the awareness on the chemistry curriculum.	All –PO1 to PO7	Report of Projek Work [WA-written assignment;PR-project work]

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STUDENT LEARNING TIME

Teaching and Learning Activities	**Student Learning Time (hours)**
1. Lecture	42
2. Independent Study - self learning - information search - library search - reading - group discussion	35
3. Project (4X) - information search - library search - Report Writing	34
4. Individual presentations	3
5. Group Presentations	6
Total	120

TEACHING METHODOLOGY

Lecture, Demonstration, and Discussion, Co-operative Learning, Independent Study, group discussion and library search.

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WEEKLY SCHEDULE

Week 1	:	Introduction. Chemistry education system in school
Week 2	:	Reformation and innovation of chemistry curriculum in secondary school: Understanding, rational and strategy. Focus on KBSM chemistry curriculum
Week 3	:	Issues and problems in implementing chemistry education curriculum.
Week 4	:	Probing understanding in chemistry education curriculum.
		MID-TERM BREAK
Week 5	:	Perspective development and changes in chemistry laboratory in school
Week 6	:	Continuation of week 5
Week 7	:	Implementation of chemistry KBSM curriculum: Research project (Planning)
Week 8	:	Implementation of chemistry KBSM curriculum: Research project (Planning)
Week 9	:	Research project: Data collection and analysis.
Week 10	:	Chemistry curriculum overseas/abroad.
Week 11	:	Implementation of chemistry KBSM curriculum: Strategy and teaching approach.
Week 12	:	Teaching specific topic of chemistry in chemistry KBSM curriculum.
Week 13	:	Presentation of assignment 2: Chemistry curriculum overseas.
Week 14	:	Presentation of assignment 3: Teaching specific chemistry topic of chemistry KBSM curriculum
Week 15	:	Revision week (1 week).
Week 16	:	Final examination (3week).

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GRADING:

EVALUATION	PERCENTAGE (%)
Individual Assignment	20
Group Project work	40
Final Examination	40
TOTAL	**100**