



UNIVERSITAS NEGERI YOGYAKARTA
FAKULTAS MIPA

SILABI

FRM/FMIPA/063-01
18 Februari 2011

Fakultas	: Matematika dan Ilmu Pengetahuan Alam
Program Studi	: Pendidikan Matematika
Mata Kuliah/Kode	: Study of Mathematics for Vocational Sec. Schools/PMA404
Jumlah SKS	: Teori=4; Praktek=0
Semester	: 6
Mata Kuliah Prasyarat/kode	: Methods of mathematics learning
Dosen	: Endah Retnowati, Ph.D.

I. Course description

This lecture covers the curriculum and instruction of mathematics for vocational schools in Indonesia. The main approach of the lecture is project based learning by which students explore, study and discuss the empirical data of vocational schools in Indonesia, the national policy related to the organization of the curriculum and instruction, framework of the curriculum, conceptual development of the learning material and also the trajectory learning scheme.

II. Standard of Competence

This lecture is proposed to assist students understand the curriculum and instruction of mathematics for vocational schools in Indonesia.

Basic competencies can be found in the table of activities planning below.



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III. Activity planning

Week	Basic Competency	Main topic	Lecture approach	Main Reference
1	Explain vocational secondary schools in Indonesia as part of the national education system	Introduction of the lecture: <ul style="list-style-type: none">National education systemVocational secondary schools (VSS) in Indonesia in general	Question and Answer Discussion	1
2-3	Explore, present and explain empirical data of vocational schools in Indonesia	Empirical data of vocational schools in Indonesia <ul style="list-style-type: none">The number of vocational secondary schools (VSS), proportion in its majors and distribution over the provincesThe number of students in VSS, their backgrounds and some outstanding achievementsThe number of math teachers in VSS, their qualification and salary/remunerationBooks, tools, media and resources available at VSS and the issues	Project based learning (Project-1) Presentation and discussion	Open/ official/ public/ online resources
4-6	Use legal documents related to the curriculum and instruction of vocational secondary schools in Indonesia to explain its curriculum and instruction	Legal documents related to the curriculum and instruction of vocational secondary schools in Indonesia: <ul style="list-style-type: none">Permendikbud Nomor 60 Tahun 2014 Tentang Kurikulum 2013 Sekolah Menengah Kejuruan dan Madrasah Aliyah KejuruanPermendikbud Nomor 61 Tahun 2014 Tentang Kurikulum Tingkat Satuan Pendidikan pada Pendidikan Dasar dan Pendidikan MenengahPermendikbud Nomor 64 Tahun 2014 Tentang Peminatan pada Pendidikan MenengahPermendikbud Nomor 103 Tahun 2014 Tentang Pembelajaran pada Pendidikan Dasar	Project based learning (Project 2) Presentation and discussion	2-9



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		<p>dan Menengah</p> <ul style="list-style-type: none"> • Permendikbud Nomor 104 Tahun 2014 Tentang Penilaian Hasil Belajar Oleh Pendidik pada Pendidikan Dasar dan Menengah • Permendikbud Nomor 105 Tahun 2014 Tentang Pendampingan Pelaksanaan Kurikulum 2013 pada Pendidikan Dasar dan Menengah • Permendikbud Nomor 111 Tahun 2014 Tentang Bimbingan dan Konseling pada Pendidikan Dasar dan Menengah • Permendikbud Nomor 158 Tahun 2014 Penyelenggaraan Sistem Kredit Semester pada Pendidikan Dasar dan Menengah 		
7	Mid-term test			
7-9	Explain framework and content of the curriculum of mathematics for vocational secondary school year 1, and also develop conceptual chain of the learning material as well the learning trajectory scheme	Curriculum and instruction of mathematics for VSS year 1	Project based learning (Project-3) Presentation and discussion	2&10
10-12	Explain framework and content of the curriculum of mathematics for vocational secondary school year 2, and also develop conceptual chain of the learning material as well the learning trajectory scheme	Curriculum and instruction of mathematics for VSS year 2	Project based learning (Project-4) Presentation and discussion	2&10
13-15	Explain framework and content of the curriculum of mathematics for vocational secondary school year 3, and also develop conceptual chain of the learning material as well the learning trajectory scheme	Curriculum and instruction of mathematics for VSS year 3	Project based learning (Project 5) Presentation and discussion	2&10
16	Evaluate the curriculum and instruction of mathematics for VSS	Overall the organization of the curriculum and instruction		



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IV References

A. Main

1. Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 Tentang Sistem Pendidikan Nasional
2. Permendikbud Nomor 60 Tahun 2014 Tentang Kurikulum 2013 Sekolah Menengah Kejuruan dan Madrasah Aliyah Kejuruan
3. Permendikbud Nomor 61 Tahun 2014 Tentang Kurikulum Tingkat Satuan Pendidikan pada Pendidikan Dasar dan Pendidikan Menengah
4. Permendikbud Nomor 64 Tahun 2014 Tentang Peminatan pada Pendidikan Menengah
5. Permendikbud Nomor 103 Tahun 2014 Tentang Pembelajaran pada Pendidikan Dasar dan Menengah
6. Permendikbud Nomor 104 Tahun 2014 Tentang Penilaian Hasil Belajar Oleh Pendidik pada Pendidikan Dasar dan Menengah
7. Permendikbud Nomor 105 Tahun 2014 Tentang Pendampingan Pelaksanaan Kurikulum 2013 pada Pendidikan Dasar dan Menengah
8. Permendikbud Nomor 111 Tahun 2014 Tentang Pembelajaran Bimbingan dan Konseling pada Pendidikan Dasar dan Menengah
9. Permendikbud Nomor 158 Tahun 2014 Penyelenggaraan Sistem Kredit Semester pada Pendidikan Dasar dan Menengah
10. Buku-buku teks matematika sekolah menengah kejuruan

B. Additional

Anderson, L.W. & Krathwohl, D. R. (2001) A taxonomy for learning, teaching and assessing: A revision of Bloom's Taxonomy of Educational Objectives. A Bridged Edition. New York, NY: Addison Wesley Longman, Inc.

And suggested readings during the lecture.

V Assessment

No	Component	Weight (%)
1	Classroom participation - Attendance - Active involvement in the classroom discussion - Quizzes	5
2	Project (5 reports)	70
3	Mid-term test	10
4	Final test	15
	Total	100



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Approved
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Yogyakarta, 6 February 2015
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