



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	: English for Mathematics Education/PMA204
Jumlah SKS	: Teori=2; Praktek=0
Semester	: 5
Mata Kuliah Prasyarat/kode	: Bahasa Inggris
Dosen	: Endah Retnowati, Ph.D.

I. Course description

During the lecture, four main literacy skills in English: reading, writing, listening and speaking, are covered. These are focused on mathematics education context. Selected articles or research publications are used to practice effective reading and comprehension. Writing tasks include short essays on facts (i.e., graphs, charts, tables), assessment reports, mathematics word problems and the solutions, and critical review (i.e., argumentations, judgement). Listening and speaking skills are integrated during discussions on reading or writing tasks. These skills are particularly facilitated through presentations to communicate ideas, raise questions and respond to other comments as well as conducting mathematics classroom instructions in english.

II. Standard of Competence

This lecture is proposed to develop students understand the basic principles of meaningful learning in mathematics and the challenges students faced when learning mathematics themes.

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



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III. Activity planning

Meeting	Basic Competency	Main material	Lecture strategy	Assessment aspect
1	Understand the study contract Fluently express daily conversations	Syllabus and contract Daily conversations	Classroom discussion Practice speaking	Students participation
2	Explain the meaning of to-be-read articles	Effective reading and comprehension	Every individual reads an assigned paragraph for the whole classroom then articulate it using own words Completing questions on the reading	Pronunciation, generated meaning, completed questions
3	Perform short essays on facts (i.e., charts, tables, graphs)	Writing short essays on facts (i.e., charts, tables, graphs)	Individual work	Attention on essay writing strategy, completed writing task
4	Perform comprehensive assessment reports	Writing assessment reports	Individual assess other student's essay from previous meeting and report the assessment	Completed rubrics and structured report
5	Perform various mathematical word problems and the solutions	Writing mathematics word problems and the solutions	Individual work on the writing and discussion with peers	Mathematics word problems based on algebra, arithmetics, geometry and statistics (or combined) and the solution
6	Conduct mathematics classroom instruction using structured and accurate expressions	Conducting mathematics classroom instructions	Group practice and then individual performance	Structured and accurate expressions
7	Conduct mathematics classroom instruction using structured and accurate expressions	Conducting mathematics classroom instructions	Group practice and then individual performance	Structured and accurate expressions



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8		Mid-term exam	Essay writing	
9	Explain the meaning of to-be-read articles	Effective reading and comprehension	Every individual reads an assigned paragraph for the whole classroom then articulate it using own words Completing questions on the reading	Pronunciation, generated meaning, completed questions
10	Perform 250 word essay of a critical review of an opinion	Writing critical review of an opinion	Individual work and peer assessment	Attention on essay writing strategy, completed writing task
11	Perform 250 word essay of a critical review of an opinion	Writing critical review of an opinion	Individual work and peer assessment	Attention on essay writing strategy, completed writing task
12	Write critical review of research result on mathematics education	Writing critical review of research result on mathematics education	Individual work and peer assessment	Attention on essay writing strategy, completed writing task
13	Write critical review of research result on mathematics education	Writing critical review of research result on mathematics education	Individual work and peer assessment	Attention on essay writing strategy, completed writing task
14	Express idea, raise questions, and respond to comments	Debate on mathematics education issues	Individual prepares an issue to present and to be debated by others	Expressing idea, raising question and responding comments
15	Express idea, raise questions, and respond to comments	Debate on mathematics education issues	Individual prepares an issue to present and to be debated by others	Expressing idea, raising question and responding comments
16	Explain the meaning of to-be-read articles	Effective reading and comprehension	Every individual reads an assigned paragraph for the whole classroom then articulate it using own words Completing questions on the reading	Pronunciation, generated meaning, completed questions



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IV References

There is no main references. Students are encouraged to read:

- Mathematics handbooks or textbooks in English.
- International journal articles on mathematics education.
- English-English dictionary.
- English grammar books.
- And any reading, video or recording in English

P3B. 2008. *Classroom english for bilingual instruction*. Yogyakarta: Universitas Negeri Yogyakarta.

Slater, S., Millen, D., & Tyrie, P. (2006). *IELTS on tract: Test practice academic*. Adelaide, South Australia: Language Australia.

V Assessment

No	Component	Weight (%)
1	Classroom participation (completed tasks every meeting or homeworks)	30
2	Presentations	20
3	Mid term test	20
4	End of term test	30
Total		100

Sighted  
Ketua Jurusan Pend. Matematika

Yogyakarta, 1 September 2014  
Lecturer

Dr. Sugiman, M.Si.  
NIP.

Endah Retnowati, Ph.D.  
NIP. 19801228 200212 2 003