

## UNIVERSITAS NEGERI YOGYAKARTA

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## **Bachelor of Education in Mathematics**

## **MODULE HANDBOOK**

| Module name:                 | Educational Science  |  |  |  |  |  |
|------------------------------|--|--|--|--|--|--|
| Module level, if applicable: | Undergraduate  |  |  |  |  |  |
| Code:                        | MDK6201  |  |  |  |  |  |
| Sub-heading, if applicable:  | -  |  |  |  |  |  |
| Classes, if applicable:      | -  |  |  |  |  |  |
| Semester:                    | 1 <sup>st</sup>  |  |  |  |  |  |
| Module coordinator:          | Arif Rohman, M.Si.   |  |  |  |  |  |
| Lecturer(s):                 | Arif Rohman, M.Si.; Estu Miyarso, M.Pd. and team   |  |  |  |  |  |
| Language:                    | Bahasa Indonesia   |  |  |  |  |  |
| Classification within the    | Compulsory course  |  |  |  |  |  |
| curriculum:                  |  |  |  |  |  |  |
| Teaching format / class      | 100 minutes lectures and 120 minutes structured activities per   |  |  |  |  |  |
| hours per week during the    | wook   |  |  |  |  |  |
| semester:                    | WOOK.  |  |  |  |  |  |
|                              | Total workload is 90,67 hours per semester which consists of   |  |  |  |  |  |
| Workload:                    | 100 minutes lectures, 120 minutes structured activities, and   |  |  |  |  |  |
|                              | 120 minutes self-study per week for 16 weeks.  |  |  |  |  |  |
| Credit points:               | 2  |  |  |  |  |  |
| Prerequisites course(s):     | -  |  |  |  |  |  |
| Course outcomes:             | After taking this course the students have ability to:   |  |  |  |  |  |
|                              | CO1. Demonstrate an attitude of responsibility and<br>independence in carrying out individual tasks and<br>group assignments |  |  |  |  |  |
|                              | CO2. Communicate ideas in solving problems in writing or verbally  |  |  |  |  |  |

|                            | 1   |             |   |              |            |  |  |
|----------------------------|---|-------------|---|--------------|------------|--|--|
|                            | CO3. Know education theory and practice from a global perspective   |             |   |              |            |  |  |
|                            | CO4. Know and understand the role and relevance science in society  |             |   |              |            |  |  |
|                            | CO5. Have particular knowledge of their field of education<br>and/or teaching discipline(s) and the learning theory<br>and practice relevant in that field or discipline  |             |   |              |            |  |  |
| Content:                   | This course discusses the basic principles of education,<br>educational science, and their application in educational<br>practice which includes: educational phenomena, historical<br>viewpoints of education, the nature of education and science<br>of education, education as a system, and issues (educational<br>issues in context education innovation).   |             |   |              |            |  |  |
|                            | Attitude assessment is carried out at each meeting by<br>observation and / or self-assessment techniques using the<br>assumption that basically every student has a good attitude.<br>The student is given a value of very good or not good attitude<br>if they show it significantly compared to other students in<br>general. The result of attitude assessment is not a component<br>of the final grades, but as one of the requirements to pass the<br>course. Students will pass from this course if at least have a<br>good attitude.<br>The final mark will be weight as follow: |             |   |              |            |  |  |
| Study / exam achievements: | No  | CO          | Assessment  | Assessment   | Weight     |  |  |
|                            | 1   | CO2,<br>CO3 | Presentation  | Observation  | 15%        |  |  |
|                            | 2   | CO4,<br>and | a. Individual assignment                                    | Written test | 10%        |  |  |
|                            |   | CO5         | <ul><li>b. Group assignment</li><li>c. Developing</li></ul> |              | 10%<br>20% |  |  |
|                            |   |             | Scientific Papers<br>d. Mid exam                            |              | 20%        |  |  |
|                            |   |             | e. Final exam   |              | 25%        |  |  |
|                            |   |             |   | Total        | 100%       |  |  |
| Forms of media:            | Board, LCD Projector, Laptop/Computer, Internet Website   |             |   |              |            |  |  |
|                            |   |             |   |              |            |  |  |

| Literature: | 1. Arif Rohman. 2009. Memahami Pendidikan dan Ilmu         |
|-------------|--|
|             | Pendidikan. Yogyakarta: Laksbang Mediatama.                |
|             | 2. Dwi Siswoyo dkk. 2007. Ilmu Pendidikan. Yogyakarta:     |
|             | UNY Press.   |
|             | 3. Driyarkara . 1980. Driyarkara tentang Pendidikan.       |
|             | Yogyakarta : Penerbit Kanisius.                            |
|             | 4. John I. Goodlad,. Educational Renewal. San francisco :  |
|             | Jossey-Bass Publishers.                                    |
|             | 5. John Dewey. 1950. Democracy and Education. New York :   |
|             | The Macmillan Company.                                     |
|             | 6. Imam Barnadib & Sutari Imam Barnadib. 1996. Beberapa    |
|             | Aspek Substansial Ilmu Pendidikan. Yogyakarta : Penerbit   |
|             | Andi.  |
|             | 72002. Filsafat Pendidikan. Yogyakarta :                   |
|             | Penerbit Adicita Karya Nusa.                               |
|             | 8. Noeng Muhadjir. 2000. Ilmu Pendidikan dan Perubahan     |
|             | Sosial. Yogyakarta : Rake Sarasin.                         |
|             | 9. Sumitro, dkk. 2006. Pengantar limu Pendidikan.          |
|             | Yogyakarta : UNY Press.                                    |
|             | 10. Tilaar, H.A.R. 2002. Pendidikan dan Perubahan Sosial : |
|             | Penganiai Pedagogik Italisiofitalii untuk indonesia .      |
|             | 11 2005 Manifesto Pendidikan Nasional                      |
|             | lakarta : Penerbit Buku Kompas                             |
|             | 12 Umar Tirtabardia & La Sulo 1997 Pengantar Pendidikan    |
|             | Jakarta : Ditien Dikti Dendikhud                           |
|             | 13 UU No 20 Tahun 2003 Tentang Sistem Pendidikan           |
|             | Nasional.  |
|             | 14. Wardiman Dioionegoro .1996. Lima Puluh Tahun           |
|             | Perkembangan Pendidikan Indonesia. Jakarta                 |
|             | Depdikbud.   |

## PLO and CO Mapping

|     | PLO1 | PLO2 | PLO3 | PLO4 | PLO5 | PLO6 | PL07 | PLO8 | PLO9 | PLO10 | PLO11 | PLO12 |
|-----|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| CO1 |      |      |      |      |      | ~    |      |      |      |       |       |       |
| CO2 |      |      |      |      |      |      |      | ~    |      |       |       |       |
| CO3 |      |      |      |      |      | ~    |      |      |      |       |       |       |
| CO4 |      |      |      |      |      |      |      | ~    |      |       |       |       |
| CO5 |      |      |      |      |      |      |      | ~    |      |       |       |       |