# UNIVERSITAS NEGERI YOGYAKARTA

## FACULTY OF MATHEMATICS AND NATURAL SCIENCES
## DEPARTMENT OF MATHEMATICS EDUCATION

Jalan Colombo Nomor 1 Yogyakarta 55281
Telepon: (0274) 565411 Pesawat 217, (0274) 565411 (TU); Fax. (0274) 548203
Laman: fmipa.uny.ac.id, E-mail: humas_fmipa@uny.ac.id

**Bachelor of Education in Mathematics**              **MODULE HANDBOOK**

| | |
|---|---|
| Module name: | Algebra |
| Module level, if applicable: | Undergraduate |
| Code: | MAA6201 |
| Sub-heading, if applicable: | - |
| Classes, if applicable: | - |
| Semester: | 1st |
| Module coordinator: | Caturiyati, M.Si. |
| Lecturer(s): | Caturiyati, M.Si. |
| Language: | Bahasa Indonesia |
| Classification within the curriculum: | Compulsory Course |
| Teaching format / class hours per week during the semester: | 100 minutes lectures and 120 minutes structured activities per week. |
| Workload: | Total workload is 90,67 hours per semester which consists of 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:<br>CO1. Demonstrate collaborative attitude and independence in carrying out individual tasks and group assignments<br>CO2. Communicate ideas in solving mathematical problems in writing or verbally<br>CO3. Able to explain school algebra concepts<br>CO4. Resolve school algebra problems and higher levels<br>CO5. Making learning design for school algebra material<br>CO6. Able to write systematically evidences related to theorems in algebra as supplies for making school algebra learning media |

| | | |
|---|---|---|
| Content: | This course discusses the scope and conceptual definitions of algebraic components, polynomials, algebraic fractions, exponents, logarithms, root forms and absolute values, understands various forms of equations and algebraic inequalities, graphs algebraic functions, arithmetic series, and geometric series. | |
| Study / exam achievements: | Attitude assessment is carried out at each meeting by observation and / or self-assessment techniques using the assumption that basically every student has a good attitude. The student is given a value of very good or not good attitude if they show it significantly compared to other students in general. The result of attitude assessment is not a component of the final grades, but as one of the requirements to pass the course. Students will pass from this course if at least have a good attitude.<br><br>The final mark will be weight as follow: | |

| No | CO | Assessment Object | Assessment Technique | Weight |
|---|---|---|---|---|
| 1 | CO1 | Presentation | Observation | 10% |
| 2 | CO2<br>CO3<br>CO4<br>CO5<br>CO6 | a. Individual Assignment<br>b. Group Assignment<br>c. Quiz<br>d. Mid<br>e. Final exam | Written test | 10%<br><br>10%<br>20%<br>20%<br>30% |
| | | | Total | 100% |

| | |
|---|---|
| Forms of media: | Board, LCD Projector, Laptop/Computer |
| Literature: | 1. Sullivan, Michael. 2007. Algebra and Trigonometry.<br>2. Beecher, J.A., Penna, J.A., Bit, M.L. 2006. College Algebra. Pearson Education, Inc as Pearson Addison-Wesley.<br>3. Holliday, et. al. 2008. Algebra 1. Glencoe Mc Graw Hill.<br>4. Holliday, et. al. 2008. Algebra 2. Glencoe Mc Graw Hill |

## PLO and CO mapping

| | PLO1 | PLO2 | PLO3 | PLO4 | PLO5 | PLO6 | PLO7 | PLO8 | PLO9 | PLO10 | PLO11 | PLO12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CO1 | | ✓ | | | | | | | | | | |
| CO2 | | | ✓ | | | | | | | | | |
| CO3 | | | | | ✓ | | | | | | | |
| CO4 | | | | | | | ✓ | | | | | |
| CO5 | | | | | | | | ✓ | | | | |
| CO6 | | | | | | | | | ✓ | | | |