UNIVERSITAS NEGERI YOGYAKARTA<br>FACULTY OF MATHEMATICS AND NATURAL SCIENCES<br>DEPARTMENT OF MATHEMATICS EDUCATION<br>Jalan Colombo Nomor 1 Yogyakarta 55281<br>Telepon(0274)565411 Pesawat 217, (0274)565411(TU),fax (0274)548203<br>Laman:fmipa.uny.ac.id, E-mail:humas_fmipa@uny.ac.id

## Bachelor of Science in Mathematics

MODULE HANDBOOK

| Module name: | Mathematical Statistics |
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| Module level,if applicable: | Undergraduate |
| Code: | MAT6323 |
| Sub-heading,if applicable: | - |
| Classes,if applicable: | - |
| Semester: | $4^{\text {th }}$ |
| Module coordinator: | Dra. Mathilda Susanti, M.Si., |
| Lecturer(s): | $1 . \quad$ Dra. Mathilda Susanti, M.Si., <br> $2 . \quad$ Dra. Rosita Kusumawati, M.Si. |
| Language: | Bahasa Indonesia |
| Classification within the <br> curriculum: | 150 minutes lectures and 180 minutes structured activities per <br> week. |
| Teaching format/class hours <br> perweek during the <br> semester: | Total workload is 136 hours per semester which consists of <br> 150 minutes lectures, 180 minutes structured activities, and <br> 180 minutes self-study per week for 16 weeks. |
| Workload: | Probability Theory (MAT6315) |
| Creditpoints: | After taking this course, the students have the ability to: <br> CO1. Demonstrate respect for the views, opinions or original <br> findings of others. <br> Co2. Demonstrate the ability to think critically, creatively, <br> innovatively, and systematically in the development of |
| Prerequisites course(s): | Course outcomes: |


|  | science and technology, both independently and in groups. <br> CO3. Demonstrate the ability to convey mathematical ideas in writing and verbally based on values of honesty <br> CO4. Explain concepts in mathematical statistics. <br> CO5. Prove the properties and theorems in mathematical statistics. <br> CO6. Solve problems by using concepts and the properties or theorems in mathematical statistics. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Content: | This course discusses the functions of random variables, limiting distributions, sampling distributions, point estimation of a parameter and its properties. |  |  |  |  |
| Study/exam achievements: | CO1: 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> The final mark will be weight as follow: |  |  |  |  |
|  | No | CO | Assessment Object | Assessment Technique | Weight |
|  | 1 | $\begin{aligned} & \hline \mathrm{CO2}, \\ & \mathrm{CO3} \end{aligned}$ | Presentation | Observation | 10\% |
|  | 2 | C04, C05, C06 | a. Individual assignment <br> b. Group assignment <br> c. Quiz <br> d. Mid-Term Examination <br> e. Final Examination | Written test | $10 \%$ $10 \%$ $20 \%$ $25 \%$ $25 \%$ |
|  |  |  |  | Total | 100\% |
| Forms of media: | Board, LCD Projector, Laptop/Computer |  |  |  |  |
| Literature: | 1. Bain, L.J andEngelhart, M. (1992). Introduction to |  |  |  |  |


|  | Probability and Mathematical Statistics. Second Edition, <br> Duxbury Press, Belmont, California. <br> 2.Robert V. Hogg, Allen T. Craig, (1995). Introduction to <br> Mathematical Statistics. Pearson Education. <br> 3. Rice, John A., 1995. Mathematical Statistics and Data <br> Analysis. Belmont: Duxbury Press. |
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## PLO and CO mapping

|  | PLO1 | PLO2 | PLO3 | PLO4 | PLO5 | PLO6 | PLO7 | PLO8 | PLO9 | PLO10 |
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| CO1 |  | $\checkmark$ |  |  |  |  |  |  |  |  |
| CO2 |  |  | $\checkmark$ |  |  |  |  |  |  |  |
| CO3 |  |  |  | $\checkmark$ |  |  |  |  |  |  |
| CO4 |  |  |  |  | $\checkmark$ |  |  |  |  |  |
| CO5 |  |  |  |  |  | $\checkmark$ |  |  |  |  |
| CO6 |  |  |  |  |  |  | $\checkmark$ |  |  |  |

