



Republic of the Philippines  
**MINDANAO UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
 Lapanan, Cagayan De Oro City

**COLLEGE OF SCIENCE AND MATHEMATICS**  
**PH.D. in Mathematical Sciences(Applied Mathematical Sciences)**  
**Applied Mathematics**

| SUBJECT CODE                   | DESCRIPTIVE TITLE                           | H O U R |      | U N I T |      | PRE-REQUISITE | CO-REQUISITE |
|--------------------------------|---|---------|------|---------|------|---------------|--------------|
|                                |   | LAB     | LEC  | LAB     | LEC  |               |              |
| <b>1ST YEAR - 1ST SEMESTER</b> |   |         |      |         |      |               |              |
| MATH608a                       | Advanced Linear Algebra                     | 0.0     | 3.0  | 0.0     | 3.0  | 3.0           |              |
| AMS 621                        | Advanced Statistics                         | 0.0     | 3.0  | 0.0     | 3.0  | 3.0           |              |
| AMS 613                        | Advanced Math Programming                   | 0.0     | 3.0  | 0.0     | 3.0  | 3.0           |              |
|                                |   | 0.0     | 9.0  | 0.0     | 9.0  | 9.0           |              |
| <b>1ST YEAR - 2ND SEMESTER</b> |   |         |      |         |      |               |              |
| AMS 622                        | Advanced Linear Models                      | 0.0     | 3.0  | 0.0     | 3.0  | 3.0           |              |
| AMS 611                        | Advanced Simulation Methods I               | 0.0     | 3.0  | 0.0     | 3.0  | 3.0           |              |
| Math 603                       | Real Analysis                               | 0.0     | 3.0  | 0.0     | 3.0  | 3.0           |              |
|                                |   | 0.0     | 9.0  | 0.0     | 9.0  | 9.0           |              |
| <b>1ST YEAR - SUMMER</b>       |   |         |      |         |      |               |              |
| Math 606                       | Functional Analysis                         | 0.0     | 3.0  | 0.0     | 3.0  | 3.0           |              |
| AMS631                         | Special Topics in Mathematical Sciences I   | 0.0     | 0.0  | 0.0     | 3.0  | 3.0           |              |
|                                |   | 0.0     | 3.0  | 0.0     | 6.0  | 6.0           |              |
| <b>2ND YEAR - 1ST SEMESTER</b> |   |         |      |         |      |               |              |
| Math 605                       | Advanced Abstract Algebra                   | 0.0     | 3.0  | 0.0     | 3.0  | 3.0           |              |
| AMS 602                        | Advanced Mathematical Modeling              | 0.0     | 3.0  | 0.0     | 3.0  | 3.0           |              |
| AMS 612                        | Advanced Simulation Methods II              | 0.0     | 3.0  | 0.0     | 3.0  | 3.0           |              |
|                                |   | 0.0     | 9.0  | 0.0     | 9.0  | 9.0           |              |
| <b>2ND YEAR - 2ND SEMESTER</b> |   |         |      |         |      |               |              |
| AMS623                         | Stochastic Processes                        | 0.0     | 0.0  | 0.0     | 3.0  | 3.0           |              |
| AMS624                         | Multivariate Analysis                       | 0.0     | 0.0  | 0.0     | 3.0  | 3.0           |              |
| AMS632                         | Special Topics in Mathematica Sciences II   | 0.0     | 0.0  | 0.0     | 3.0  | 3.0           |              |
|                                |   | 0.0     | 0.0  | 0.0     | 9.0  | 9.0           |              |
| <b>2ND YEAR - SUMMER</b>       |   |         |      |         |      |               |              |
| Math 631                       | Philosophy of Mathematics                   | 0.0     | 3.0  | 0.0     | 3.0  | 3.0           |              |
| AMS633                         | Special Topics in Mathematical Sciences III | 0.0     | 3.0  | 0.0     | 3.0  | 3.0           |              |
| AMS 699                        | Dissertation Writing                        | 0.0     | 15.0 | 0.0     | 15.0 | 15.0          |              |
|                                |   | 0.0     | 21.0 | 0.0     | 21.0 | 21.0          |              |