## Roadmap B.S. in Mathematics: General Mathematics option - AY 2022-2023

| YEAR 1: FALL |  |  | YEAR 1: SPRING |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- |
| COURSE | UNITS | PREREQ | COURSE | UNITS | PREREQ |
| MATH 75 (LD GE B4) | 4 | CRT/ALEKS PPL | MATH 76 | 4 | MATH 75/(75A\&B) |
| CSCI 40 | 4 | MATH 75 (Conc. OK) | MATH 101 | 4 | MATH 75/(75A\&B) |
| LD GE A1 | 3 |  | PHYS 4A+ 4AL (B1+ B3) | 4 | MATH 76 (Conc. OK) |
| LD GE A3 | 3 |  | LD GE E | 3 |  |
| TOTAL UNITS | $14 \quad$ (9 GE) | TOTAL UNITS | $15 \quad$ (7 GE) |  |  |


| YEAR 2: FALL |  |  | YEAR 2: SPRING |  |
| :--- | ---: | :--- | :--- | :---: |
| COURSE | UNITS | PREREQ | COURSE | UNITS |
| MATH 77 | 4 | MATH 76 | MATH 81 | 3 |
| MATH 111 | 4 | MATH 76 | MATH Elective ${ }^{2}$ | $3 / 4$ |
| LD GE B2 | 3 |  | MATH Elective ${ }^{2}$ | $3 / 4$ |
| LD GE A2 | 3 |  | LD GE C1 | 3 |
|  |  |  | HIST 11 or 12 (D1) |  |
| TOTAL UNITS | $14 \quad(6 \mathrm{GE})$ | TOTAL UNITS | 3 |  |


| YEAR 3: FALL |  |  | YEAR 3: SPRING |  |
| :--- | ---: | :--- | :--- | :--- |
| COURSE | UNITS | PREREQ | COURSE | UNITS |
| MATH 152 $^{1}$ | 4 | MATH 77 | MATH 151 $^{1}$ or 171 $^{1}$ | 4 | \(\left.\begin{array}{l}MATH 111; and MATH <br>

152 (for MATH 151)\end{array}\right]\)

| YEAR 4: FALL |  |  | YEAR 4: SPRING |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| COURSE | UNITS | PREREQ | COURSE | UNITS | PREREQ |
| MATH $171{ }^{1}$ or $151{ }^{1}$ | 4 | MATH 111; and MATH 152 (for MATH 151) | $\mathrm{MATH}^{2}$ or Free Elective | 3/4 |  |
| Free or MATH ${ }^{2}$ Elective | 3/4 |  | UD GE IB | 3 |  |
| Free Elective | 3 |  | UD GE IC | 3 |  |
| UD GE ID ${ }^{0}$ | 3 |  | Free Elective | 3 |  |
| UD MI ${ }^{0}$ | 3 |  | Free Elective | 3 |  |
| TOTAL UNITS | 16/17 | (6 GE) | TOTAL UNITS | 15/16 | (6 GE) |

${ }^{0} 3$ units of MATH 75 (or MATH 75A) also will satisfy the G.E. Foundation B4 requirement.
${ }^{0}$ PHYS 4AL is not required for this option in the math major. If students wish to include PHYS 4A as a General Education Breadth course, they must also take PHYS 4AL.
${ }^{0}$ Consider taking ANTH 105W (UD MI) or ANTH 116W (UD GE ID) to satisfy your upper division Writing Skills Requirement.
${ }^{1}$ It is suggested to take MATH 81 before taking MATH 152.
${ }^{1}$ Taking MATH 116 or another proofs class before taking MATH 151 has been found beneficial.
${ }^{1}$ Taking at least one of MATH 161, 128, or 165 before taking MATH 171 has been found beneficial.
${ }^{2}$ MATH Electives for this option include: MATH 193A/B/C/D and five 3-4 unit mathematics course, upper division or graduate (excluding MATH $100,102,133,134,137,138,139$ ). Special conditions apply for graduate courses; see department advisor.
Students may select their MATH electives freely, as long as this decision is consistent with the Culminating Experience they choose to have.
Students in this option will need to choose a Culminating Experience as soon as possible. It can be any of the Culminating Experiences from the other options (as listed below), as long as they have the required prerequisites:

- MATH 193A (prerequisite MATH 111 and at least two of MATH 109, 121, 122, 123, 152, 181, 182) + MATH 198 (in Applied Mathematics), or
- MATH 193B (prerequisite MATH 111 and 152; MATH 152 concurrently OK) + MATH 198 (in Pure Mathematics), or
- MATH 193C (prerequisite MATH 106 and 107; MATH 106 concurrently OK), or
- MATH 149S (prerequisite MATH 151, 161, 171; MATH 161 and 171 concurrently OK). Students choosing this Culminating Experience may take any of the MATH 193 A, B, C or D seminars, assuming that they have the prerequisites.

Advising note: Students should meet with their academic advisor every semester, to plan for their courses.

