2021-2022 Mathematics BS Degree Plan Student name: ____ UMID: Concentration: None Advisor name: The Purpose of General Education is to Gain: Knowledge of Human Cultures and the Physical and Natural World Personal and Social Responsibility MONTEVALLO Intellectual and Practical Skills Integrative and Applied Learning **Key Courses For General Education (40-44 hours)** Major Course requirements (49 hours) MATH 170 (Calculus I) 1. Written Composition (6) MATH 171 (Calculus II) Choose: ENG 101 or 103. MATH 185 (Survey of Mathematics) Choose: ENG 102 or 104. MATH 247 (Intro to Discrete Mathematics) 2. Humanities & Fine Arts (18) MATH 261 (Intro to Prog. & Comp. Alg. Sys.) Choose one: ENG 231, 233, 232 or 234.* *Students must complete a six-hour sequence in either History or MATH 271 (Sequences, Series & Indet. Forms) Literature. Students may complete both sequences. MATH 272 (Calculus III) Choose: COMS 101 or 102. MATH 310 (Foundations of Mathematics) Choose one Fine Arts: ART 100, 218, 219; MATH 376 (Complex Analysis) MC 100, 325; MUS 121 or 122, 125, 211, 255, MATH 390 (Linear Algebra) 342; THEA 120 or 122. MATH 440 (Abstract Algebra) Choose one Humanities: MATH 470 (Real Analysis) ENG 231 or 233, 232 or 234; FRN 101, 102, 150, MATH 480 (Topology) 201, 202, 250; SPN 101 or 103, 102 or 104, 150, MATH 484 (Directed Reading in Mathematics) 201, 202, 250; GER 101, 102, 201, 202; MATH 485 (Senior Seminar) PHIL 110 or 111, 180, 220 or 221, 230, 280, 290. MATH Elective (200 level or above) Choose two of the following (not used above): MATH Elective (300 level or above) ART 100, 218, 219; ENG 231 or 233, 232 or 234; FRN 101, 102, 150, 201, 202, 250; SPN 101 or 103, 3 Must earn a GPA of 2.0 or higher for all upper-division mathematics 102 or 104, 150, 201, 202, 250; GER 101, 102, 201, courses as well as a major GPA of 2.0 or higher. 202; MC 100, 325; MUS 121 or 122, 125, 211, 255, 342; Additional Requirements (8-12 hours) PHIL 110 or 111, 180, 220 or 221, 230, 280, 290; 8 hours at the 200 level or above taken in ONE THEA 120 or 122. of the following: Biology, Chemistry or Physics* 3. Natural Sciences & Mathematics (12) Choose one lab science from two different disciplines: BIO 100, 105-107; CHEM 100-102, 121, 122; OR choose PHIL 330 and 9 hours from the ES 100; GEOL 110, 115; PHYS 100 or higher. following: PHIL 110, 180, 250, 280, 290, Choose: MATH 170. 300, 440. 4. History, Social & Behavioral Sciences (12) Choose one History: HIST 101, 103, 102 or 104.* *Students who complete the science option will fulfill one of the two lab sciences required for general education. *Students must complete a six-hour sequence in either History or Literature. Students may complete both sequences. Choose three of the following not used above: General Electives (15-23 hours) EC 231, 232; FCS 291, 402; GEOG 231; HIST 101 or 103, 102 or 104; POS 200, 250; PSYC 201/202; SOC 101/102; SWK 203, 260, 322. 5. Personal Development (3) Choose: MATH 261. **Indicates requirement is satisfied in major course requirements. Minor Course Requirements (Optional) Additional Requirements for Degree **Bachelor of Science Requirements** Satisfied through major requirements. **GENERAL GRADUATION REQUIREMENTS** Total Hours Required: Total Hours Completed to Date: 1. 50% of hrs in major area at UM 5. 45 hr limit of non-traditional credit Hours Remaining for Completion: 2. 30 hrs 300/400 at UM 6. 6-hr sequence in history or literature Hours Currently Registered: 3. 30 of last 40 hours at UM 7. Capstone experience within major

4. 64 hr limit from 2-year school

8. 2.0 or higher UM GPA and in all major and minor areas

Hours Remaining: