	ΜΑΊ	BACHELOR OF SCIENCE HEMATICS MAJOR 2015/16 Academic Year
REQUIRED JUNIOR LEVEL COURSES <sup>1,2</sup>		9 CREDITS
<ul> <li>MATH 114: Elementary Calculus I<sup>3</sup></li> <li>MATH 115: Elementary Calculus II</li> <li>MATH 120: Basic Linear Algebra I or MATH 125: Linear Algebra I</li> </ul>		
REQUIRED SENIOR LEVEL COURSES		18 CREDITS
15 CREDITS       MATH 214: Intermediate Calculus I         MATH 215: Intermediate Calculus II         MATH 225: Linear Algebra II         MATH 310: Real Analysis         MATH 330: Ordinary Differential Equations         3 CREDITS         MATH 200: Fundamental Concepts of Mathematics         OR		
GENERAL SENIOR LEVEL COURSES		24 CREDITS
Within the 24 credits required to meet this major's general requirements, a min	nimum of 6	credits must be completed at the 400-level.
<ul> <li>MATH 200: Fundamental Concepts of Mathematics</li> <li>MATH 222: Introduction to Discrete Mathematics</li> <li>MATH 228: Algebra: Introduction to Ring Theory</li> <li>MATH 241: Geometry</li> <li>STAT 265: Probability Theory</li> <li>MATH 311: Theory of Functions of a Complex Variable</li> <li>MATH 320: Elementary Number Theory</li> <li>MATH 321: Fields and Modules</li> <li>MATH 335: Numerical Methods</li> <li>MATH 341: Modern Geometries</li> <li>MATH 350: Introduction to Graph Theory</li> <li>MATH 361: History of Mathematics</li> <li>MATH 410: Analysis and Topology</li> <li>MATH 420: Groups and Galois Theory</li> <li>MATH 430: Applied Dynamical Systems</li> <li>MATH 436: Introduction to Partial Differential Equations</li> <li>MATH 495: Special Topics in Mathematics<sup>4</sup></li> </ul>		

## **IMPORTANT PLANNING NOTES**

- 1. These courses can be used to satisfy core requirements in the Bachelor of Science degree. Additional prerequisites may be required for other courses in this major.
- 2. Students are required to consult with the MacEwan University Academic Calendar to ensure they meet the prerequisites for all Mathematics courses they enrol in.
- 3. This requirement can also be met with MATH 113, which was previously offered at MacEwan University.
- 4. Students may take MATH 495 for credit a maximum of two times, as long as the course topic is different each time they take it.

This planning sheet should be used only as a **guide** for course planning and it should be used in conjunction with the Bachelor of Science Degree Planner. Remember: not all courses listed are offered each year and course offerings are subject to change. In the event of a discrepancy between the information presented on this sheet and that available on myStudentSystem, the information on myStudentSystem will be considered accurate.