Math 140 Course Syllabus
Sandhills Community College
Department of Mathematics

Course:	MAT 140 Survey of Mathematics
Credit Hours:	3
Lecture Hours:	3 per week
Lab Hours:	0 per week
Prerequisite:	MAT 070 with grade of C or higher or placement into MAT 080
Corequisite:	None
Course Description:	This course provides an introduction in a non-technical setting to selected topics in mathematics.Topics may include, but are not limited to, sets, logic, probability, statistics, matrices, mathematical systems, geometry, topology, mathematics of finance, and modeling. Upon completion, students should be able to understand a variety of mathematical applications, think logically, and be able to work collaboratively and independently.**This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.**
Text: (Subject to change)	**A Survey of Mathematics with Applications,** 7th Edition Angel, Abbott and Runde, Addison-Wesley , ISBN: 0-321-11250-4.
Goals and Objectives:	Upon successful completion of the course, students should be able to: 1. Apply critical thinking skills to certain inductive reasoning problems. 2. Discriminate between sets, subsets, and elements. 3. Use Venn diagrams in set operations of union, intersection, and complement. 4. Use Venn diagrams to verify equality of sets. 5. Apply Venn diagrams in solving cardinality problems. 6. Use symbolic logical connectives to analyze the syntax of statements. 7. Use truth tables to evaluate the truth value of compound statements involving negation, conjunction, disjunction, conditional and/or bi-conditional connectives. 8. Use truth tables to verify the logical equivalence of compound statements. 9. Apply truth tables to solving symbolic arguments. 10. Convert between base 10 and other bases. 11. Add, subtract, multiply, and divide with integers, ratio fractions, and decimals. *Use historic systems of numeration. *Calculate perimeter and area of basic geometrical figures. *Determine mean, median, and mode. *Solve problems of probability and statistics. **(*Topics from these areas will be chosen by instructor.)**

General Education:	Students who are successful in this course will improve in the following general education areas: reading, oral communication, mathematical skills, problem solving, critical thinking, and cooperating with others.
Course Requirements:	TEXT, paper, pencils, notebook and notebook paper, erasers, scientific calculator.
Grading Scale:	Grading scale: 92 - 100 = A 84 - 91= B 76 - 83 = C 70 - 75 = D Less than 70 = F