

Math 115 Course Syllabus
Sandhills Community College
Department of Mathematics

Course:	MAT 115 Mathematical Models
Credit Hours:	3
Lecture Hours:	4 per week
Lab Hours:	0 per week
Prerequisite:	MAT 070 with a grade of C or higher or appropriate placement score
Corequisite:	None
Course Description:	This course develops the ability to utilize mathematical skills and technology to solve problems at a level found in non-mathematics-intensive programs. Topics include applications to percent, ratio and proportion, formulas, statistics, functional notation, linear functions and their groups, probability, sampling techniques, scatter plots, and modeling. Upon completion, students should be able to solve practical problems, reason and communicate with mathematics, and work confidently, collaboratively, and independently.
Text: (Subject to change)	<u>Fundamentals of Algebraic Modeling</u> , 4th edition, Timmons, Johnson, McCook, Thomson Brooks Cole, ISBN 0-534-40451-0
Goals and Objectives:	When the course is completed, the Math 115 student should be able to model and solve application problems while learning to: <ol style="list-style-type: none"> 1. Add, subtract, multiply, and divide real numbers 2. Apply ratio and proportions 3. Measure and utilize both English and metric measurements 4. Solve percent problems 5. Use equations and formulas to solve problems 6. Represent the solutions of a function graphically 7. Translate from verbal into numeric, symbolic, and graphic form 8. Conduct simple experiments and calculate probability 9. Describe and evaluate sampling techniques 10. Evaluate and construct statistics, tables, graphs and scatter plots
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:	Sharp Scientific calculator
Grading Scale:	Grading scale: 92 - 100 = A 84 - 91 = B 76 - 83 = C

70 - 75 = D

Less than 70 = F