

## SPRINGFIELD TECHNICAL COMMUNITY COLLEGE

## ACADEMIC AFFAIRS

Course Number: 074 Class/Lect. Hours: 6 Lab Hours:          Credits: 4 Dept.: Mathematics  
 Course Title: Pre-Statistics Semester: Spring Year: 2019

**Course Description, Prerequisite, Corequisite:****COURSE DESCRIPTION**

Topics include place value system, order of operations, fractions, operations with these numbers. Additional topics include decimal notation, percent notation, and conversions between decimal, fractional, and percent notation, basic statistical measures. Also included is an introduction to Algebra, operations of integers, evaluate variable expressions, solving equations and formulas. Also collecting, displaying and interpretation of small data sets. Credit for this course will not be counted toward fulfilling graduations requirements at STCC.

PREREQUISITE: None

**OBJECTIVES/COMPETENCIES**

Course Objectives	Competencies
<p><b>OBJECTIVES:</b></p> <p>Upon completion of this course, a student will be able to:</p> <ol style="list-style-type: none"> <li>1. Round a number to a specified place value.</li> <li>2. Simplify an expression applying the order of operations.</li> <li>3. Solve simple equations.</li> </ol>	<p>Same topics from Pre-Algebra, and Algebra one that are applied to Statistics. Prepared to succeed in Statistics.</p>

Course Objectives	Competencies
<ol style="list-style-type: none"><li>4. Solve equations involving proportions.</li><li>5. Simplify a fraction to lowest terms.</li><li>6. Perform the operations of addition, subtraction, multiplication, and division with fractions.</li><li>7. Determine which decimal number is larger.</li><li>8. Solve applied problems requiring addition, subtraction, multiplication, or division of decimals.</li><li>9. Round a decimal to as specified place value.</li><li>10. Convert a decimal to a fraction.</li><li>11. Convert fraction into decimal.</li><li>12. Convert from a percent to a decimal.</li><li>13. Convert from a decimal to a percent.</li><li>14. Convert from a fraction to a percent.</li><li>15. Convert from a percent to a fraction.</li><li>16. Solve applied problems, which involve percent's using equations.</li><li>17. Compute average, median and mode for a data set.</li><li>18. Find the square root of a number.</li><li>19. Perform basic integer operations.</li><li>20. Evaluate variable expressions.</li><li>21. Translate phrases to algebraic expressions.</li><li>22. Solve problems involving order.</li><li>23. Evaluate expressions involving subtraction of signed numbers.</li><li>24. Simplify numeric expressions.</li><li>25. Evaluate expressions involving multiplication of signed numbers.</li><li>26. Evaluate expressions involving multiplication or more than two signed numbers.</li><li>27. Evaluate expressions involving division of signed numbers</li><li>28. Find the reciprocal of a number.</li><li>29. Simplify expressions involving grouping symbols.</li><li>30. Apply order of operations to evaluate an expression.</li><li>31. Solve equations with parentheses.</li><li>32. Solve applied problems.</li><li>33. Solve equations involving percent.</li></ol>	

<b>Course Objectives</b>	<b>Competencies</b>
<p>mmij</p> <ul style="list-style-type: none"><li>34. Solve applied problems involving percent's.</li><li>35. Solve literal equations and formulas.</li><li>36. Linear Regression for two variables.</li><li>37. Reading and constructing graphs, tables, histograms, and number plots.</li><li>38. Collecting and interpreting small data sets.</li><li>39. Properly implementing order of operations in a calculator.</li></ul>	