**SYLLABUS**

MTH 112 – 71  
Pre-Calculus Algebra  
3.0 Credit Hours  
Summer 2015  
Second Term Monday/Tuesday/Wednesday/Thursday

### Course Information

<table>
<thead>
<tr>
<th>Prerequisite(s)</th>
<th>Students are required to complete <em>one or more of the following</em> prerequisites for this course:</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>• COMPASS score of 63 or higher on Algebra section or 0 – 45 on the College Algebra section</td>
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<tr>
<td></td>
<td>• A transcript on file verifying a grade of “C” or higher in MTH 100 (or an equivalent math course)</td>
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<td></td>
<td>• A score of 25 or higher on the Mathematics portion of the ACT</td>
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<tr>
<td></td>
<td>• A score of 580 or higher on the Mathematics portion of the SAT</td>
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<td></td>
<td>Students who enroll without completing prerequisites for this course may be withdrawn by the College and may not qualify for a refund of tuition. It is the responsibility of the student to ensure that all course prerequisites are completed and documented at the College.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Description</th>
<th>This course emphasizes the algebra of functions – including polynomial, rational, exponential, and logarithmic functions. The course also covers systems of equations and inequalities, quadratic inequalities, and the Binomial Theorem. Additional topics may include matrices, Cramer’s Rule, and mathematical induction.</th>
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<table>
<thead>
<tr>
<th>Student Learning Outcomes</th>
<th>The five general education areas for the college are mathematical skills, computer skills, writing skills, oral communication skills, and critical thinking skills. Students will demonstrate</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>• competence in applying algebraic skills and concepts</td>
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<tr>
<td></td>
<td>• competence in applying coordinate geometry</td>
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<tr>
<td></td>
<td>• ability to analyze functions</td>
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<td></td>
<td>• knowledge of topics in preparation for calculus.</td>
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<table>
<thead>
<tr>
<th>Class days and time</th>
<th>Mondays/Tuesdays/Wednesdays/Thursdays 10:05 – 12:20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus and Class location</td>
<td>Martin, Room 2826</td>
</tr>
<tr>
<td>Last Date of Withdrawal</td>
<td>Friday, July 24, 2015</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Required textbook and Course Materials</th>
<th>Precalculus 5th Edition – Author: Blitzer</th>
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<tbody>
<tr>
<td></td>
<td>MyLabsPlus Access Code</td>
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<thead>
<tr>
<th>Make-up policy</th>
<th>Students who miss a test or quiz should contact the instructor before the next class meeting. Students who have an excused absence (see Standard College Policies sheet) should present documentation and complete any make-up work within one week of the last day covered by their excuse. Students who will miss a test or quiz because of official school events must make arrangements for making up work prior to missing.</th>
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<thead>
<tr>
<th>Homework</th>
<th>The Homework portion of the grade will come from work on MyLabsPlus. Each student must have a MyLabsPlus student access code.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes</td>
<td>A number of quizzes will be given. Some quizzes may be unannounced. At least one quiz grade will be dropped. Students who are tardy will not be given extra time for quizzes or tests.</td>
</tr>
<tr>
<td>Comprehensive Testing</td>
<td>Each major test may include up to 20% review material. Final Exam covers all material.</td>
</tr>
<tr>
<td>Calculator Use</td>
<td>A basic scientific calculator is sufficient for this course, and may be used on quizzes and tests. The TI30 or TI36 is recommended. However, your instructor has the final say as to what type of calculator you may use. The use of graphing, programmable, or cell phone calculators is not allowed.</td>
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<table>
<thead>
<tr>
<th>Final Exam</th>
<th>Tuesday, August 4, 2015 from 10:30 – 12:30 PM</th>
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<table>
<thead>
<tr>
<th>Tutors and Office of Specialized Student Services</th>
<th>Shelton State Community College is dedicated to the success of its students. To further that goal, free tutoring is available to all currently enrolled students. If you need additional assistance to succeed, contact Annette Cook at <a href="mailto:acook@sheltonstate.edu">acook@sheltonstate.edu</a>. If you have a disability and need accommodations to help you be successful, contact Michele Minor at <a href="mailto:m.minor@sheltonstate.edu">m.minor@sheltonstate.edu</a> or visit her in the Office of Specialized Student Services.</th>
</tr>
</thead>
</table>
Instructor Information

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Shywanda Moore</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-mail and phone number</td>
<td>Email: <a href="mailto:srmoore@sheltonstate.edu">srmoore@sheltonstate.edu</a> Phone: 205-391-2371</td>
</tr>
<tr>
<td>Student hours and location</td>
<td>Office: 2705 Hours: M/W 12:30 – 2:00 PM</td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://www.sheltonstate.edu">www.sheltonstate.edu</a>, Faculty/Staff, Faculty Website Directory, Shywanda Moore</td>
</tr>
<tr>
<td>Division Chair</td>
<td>Darrell Hagler</td>
</tr>
</tbody>
</table>

College Policy Information

<table>
<thead>
<tr>
<th>Academic Misconduct</th>
<th>Students are expected to be honorable in all college assignments. Suspected cases of academic misconduct are reported to the Dean of Instructional Services.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance Policy</td>
<td>SSCC Attendance Policy: Students are expected to attend all classes for which they are registered, to be prompt, and to remain in class for the entire time. Attendance will be recorded at every class meeting. On the final grade report, instructors are required to identify the last day of attendance for all students who receive a grade of “F”. Students who are unable to attend class regularly, regardless of the reason or circumstance, should withdraw from the class. Withdrawal from class can affect eligibility for federal financial aid.</td>
</tr>
<tr>
<td>Standard College Policies</td>
<td>The Standard College Policies apply to all classes at the college and are a part of every official course syllabus; each student receives a copy when he or she completes the vehicle registration/waiver procedure. It is also available from the College website, <a href="http://www.sheltonstate.edu">www.sheltonstate.edu</a>. It is the responsibility of the student to have a copy of these policies and to abide by them. This class syllabus is intended to give further detail about the policies and expectations in this class. College policies are also published in the Schedule of Classes and the SSCC College Catalog/Student Handbook. Students are expected to be aware of and abide by College policies in every class.</td>
</tr>
<tr>
<td>Student Email (Bucs Mail)</td>
<td>All students who are or have been registered for classes at Shelton State Community College are provided an email account. Students who are currently registered must have an email account. Electronic mail is the official method of communication for delivery of information. Shelton State designated communicators may use this email account to send official communications to the student body. Student email addresses will be recorded in the college’s electronic directories and records. To activate/sign in to your Bucs Mail account, visit the Student Email link at <a href="http://www.sheltonstate.edu">www.sheltonstate.edu</a>.</td>
</tr>
<tr>
<td>Emergency Preparedness and Sexual Misconduct</td>
<td>Shelton State Community College continues to be committed to a safe teaching and learning environment for students and employees. In an effort to further strengthen efforts at keeping the College Community free from weapon related violence and to eradicate sexual misconduct crimes and infractions, SSCC has recently enacted the following policies that address these areas specifically. Sexual misconduct is an often underreported crime and victims should be aware that SSCC has a confidential process in place for reporting such actions and for helping victims identify resources for assistance. Links to these policies and other important emergency preparedness related topics may be found on the college website: <a href="http://www.sheltonstate.edu/discover_sscceeeoc_statement.aspx">http://www.sheltonstate.edu/discover_sscceeeoc_statement.aspx</a>.</td>
</tr>
<tr>
<td>Quality Enhancement Plan</td>
<td>Shelton State’s Quality Enhancement Plan (QEP) Improving Student Success in Online Classes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activities</th>
<th>% of Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework Average</td>
<td>10%</td>
</tr>
<tr>
<td>Quiz Average</td>
<td>15%</td>
</tr>
<tr>
<td>Test 1</td>
<td>15%</td>
</tr>
<tr>
<td>Test 2</td>
<td>15%</td>
</tr>
<tr>
<td>Test 3</td>
<td>15%</td>
</tr>
<tr>
<td>Comprehensive Final Exam</td>
<td>30%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

Letter grades will be assigned according to the following:

<table>
<thead>
<tr>
<th>Percentage Grade</th>
<th>Letter grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100</td>
<td>A</td>
</tr>
<tr>
<td>80-89</td>
<td>B</td>
</tr>
<tr>
<td>70-79</td>
<td>C</td>
</tr>
<tr>
<td>60-69</td>
<td>D</td>
</tr>
<tr>
<td>59 and below</td>
<td>F</td>
</tr>
</tbody>
</table>

ATTENDANCE INCENTIVE: Students who take all tests and have no more than 1 unexcused absence may replace their lowest test grade with the final exam score. The final exam is required.

The College does not discriminate on the basis of race, color, national origin, sex, disability, or age in its admissions, programs, and services in compliance with Title VI and VII of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, Title IX of the Educational Amendments of 1972, and the Americans with Disabilities Act of 1990. - See more at: http://www.sheltonstate.edu/discover_sscceeeoc_statement.aspx#sthash.ZEfKOVpJ.dpuf
All MLP assignments are due on the dates indicated below by 11:59pm.

<table>
<thead>
<tr>
<th>DAY</th>
<th>DATE</th>
<th>SECTION / TOPIC</th>
<th>PAGE #</th>
<th>Practice – odd exercises only (eoo means every other odd)</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tues. 6/30</td>
<td>1.2 Basics of Functions and Graphs</td>
<td>168-170</td>
<td>1-37, 55-91</td>
<td>Thurs. 7/02</td>
</tr>
<tr>
<td>2</td>
<td>Wed. 7/01</td>
<td>1.3 More on Functions</td>
<td>182-187</td>
<td>1-71, 107-111</td>
<td>Sun. 7/5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.6 Transformation of Functions</td>
<td>227-228</td>
<td>1-117 (eoo)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Thurs. 7/02</td>
<td>1.6 (continued)</td>
<td>242-243</td>
<td>1-79</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>1.7 Combination of Functions</td>
<td></td>
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<tr>
<td>4</td>
<td>Mon. 7/06</td>
<td>2.2 Quadratic Functions</td>
<td>313-314</td>
<td>1-43, 57-60 (all)</td>
<td>Tues. 7/07</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.3 Polynomial Functions and their Graphs</td>
<td>330-331</td>
<td>1-63</td>
<td></td>
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<tr>
<td>5</td>
<td>Tues. 7/07</td>
<td>Review</td>
<td></td>
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<tr>
<td>6</td>
<td>Wed. 7/08</td>
<td>Test 1: Sections 1.2, 1.3, 1.6, 1.7, 2.2, 2.3</td>
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<tr>
<td>7</td>
<td>Thurs. 7/09</td>
<td>2.4 Dividing Polynomials; Factor/Remainder Theorems</td>
<td>343-344</td>
<td>1-45</td>
<td>Sun. 7/12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.5 Zeros of Polynomial Functions</td>
<td>356-357</td>
<td>1-31, 39-51</td>
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</tr>
<tr>
<td>8</td>
<td>Mon. 7/13</td>
<td>2.6 Rational Functions and their Graphs</td>
<td>377-378</td>
<td>1-77</td>
<td>Wed. 7/15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.7 Polynomial and Rational Inequalities</td>
<td>391</td>
<td>1-59</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Tues. 7/14</td>
<td>1.8 Inverse Functions</td>
<td>254-256</td>
<td>1-51, 77-83</td>
<td>Wed. 7/15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.1 Exponential Functions</td>
<td>423-425</td>
<td>1-55, 61, 63</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Wed. 7/15</td>
<td>Review</td>
<td></td>
<td></td>
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<tr>
<td>11</td>
<td>Thurs. 7/16</td>
<td>Test 2: Sections 2.4 – 2.7, 1.8, 3.1, and about 20% from Test 1</td>
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<tr>
<td>12</td>
<td>Mon. 7/20</td>
<td>3.2 Logarithmic Functions</td>
<td>437-438</td>
<td>1-99</td>
<td>Wed. 7/22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.3 Properties of Logarithms</td>
<td>449</td>
<td>1-81</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Tues. 7/21</td>
<td>3.4 Exponential and Logarithmic Equations</td>
<td>461-463</td>
<td>1-89, 117, 118</td>
<td>Thurs. 7/23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.5 Exponential Growth &amp; Decay; Modeling Data</td>
<td>478-479</td>
<td>1-25</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Wed. 7/22</td>
<td>1.9 Circles</td>
<td>264</td>
<td>31-63</td>
<td>Thurs. 7/23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7.4 Systems of Nonlinear Equations</td>
<td>819</td>
<td>1-41</td>
<td>Mon. 7/27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7.4 (continued)</td>
<td>819</td>
<td>1-41</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Thurs. 7/23</td>
<td>7.5 Systems of Inequalities</td>
<td>831-832</td>
<td>1-61 (eoo), 63, 65, 67</td>
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<td>Last Day to Withdraw – Friday, July 24, 2015</td>
<td></td>
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<tr>
<td>16</td>
<td>Mon. 7/27</td>
<td>Review</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Tues. 7/28</td>
<td>Test 3: Sections 3.2 – 3.5, 1.9, 7.4, 7.5, and about 20% from Tests 1 and 2</td>
<td></td>
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<tr>
<td>18</td>
<td>Wed. 7/29</td>
<td>8.1 Matrix Solutions</td>
<td>859-861</td>
<td>1-17, 21-37, 47</td>
<td>Mon. 8/3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8.2 Inconsistent and Dependent Systems</td>
<td>869</td>
<td>1-9</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Thurs. 7/30</td>
<td>REVIEW FOR FINAL EXAM</td>
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</tbody>
</table>

Comprehensive Final Exam: Tuesday, August 4, 2015 from 10:30 – 12:30

This course outline and the dates established therein are tentative, and the instructor reserves the right to change them.