

MATH 1513 COURSE ACTIVITIES

- MODULE ONE
 - Preparation
 - (optional) Work MyMathLab Module One Skill Check Quiz
 - (optional) Work MyMathLab Module One Skill Check Follow-Up

 - Homework: MyMathLab Section **1.1** Functions and Models
 - Assignment: Read and study pages 9-18 in the text.

 - Homework: MyMathLab Section **1.2** Graphs of Functions
 - Assignment: Read and study pages 27-37 in the text.
 - (maybe?) Collaborative Learning Activity: Creating Scatterplots from a Data Set 8

 - Preparation:
 - (optional) Work MyMathLab Mid-Module Skill Check Quiz
 - (optional) Work MyMathLab Mid-Module Skill Check Follow-Up

 - Homework: MyMathLab Section **1.3** Linear Functions
 - Assignment: Read and study pages 43-54 in the text.

 - Homework: MyMathLab Section **1.4** Equations of Line
 - Assignment: Read and study pages 59-69 in the text.
 - (maybe?) Collaborative Learning Activity: Difference Quotient

 - Homework: MyMathLab Section **2.1** Algebraic and Graphical Solution of Linear Equations
 - Assignment: Read and study pages 90-99 in the text.
 - (maybe?) Collaborative Learning Activity: Direct Variation/Constant of Variation
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 - Exam Preparation: In the week prior to your test,
 - review all notes;
 - re-read the assigned textbook pages;
 - re-work homework problems, including Study Plan items;
 - work MyMathLab Module One Review Problems;
 - ask your instructor or an OCCC Math Lab staff member for help if you do not understand a concept.

- MODULE TWO
 - Preparation: (optional) MML Chapter Two Skill Check Quiz
 - (optional) Work MyMathLab Module Two Skill Check Quiz
 - (optional) Work MyMathLab Module Two Skill Check Follow-Up
 - Homework: Section **3.1** Quadratic Functions; Parabolas
 - Assignment: Read and study pages 169-178 in the text.
 - Homework: MyMathLab Section **3.2** Solving Quadratic Equations
 - Assignment: Read and study pages 183-194 in the text.
 - (maybe?) Collaborative Learning Activity: Rocket Height Activity
 - Homework: MyMathLab Section **3.3** Piecewise-Defined Functions
 - Assignment: Read and study pages 199-204 in the text.
 - (maybe?) Collaborative Learning Activities: Matching Graphs Activity; Overtime Payroll Activity
 - Preparation: Chapter 4 Algebra Toolbox: Identify Graphs of Key Functions
 - Homework: MyMathLab Assignment on Key Graphs; Section **4.1a** Vertex Form of Quadratics; Transformations of Key Graphs
 - Assignment: Read and study pages 247-255 in the text.
 - (maybe?) Collaborative Learning Activity: Transformation Activity
 - Homework: Section **4.1b** Symmetry of Graphs and Even/Odd Functions
 - Assignment: Read and study pages 255-258 in the text.
 - Homework: Section **4.2** Combining Functions; Composition of Functions
 - Assignment: Read and study pages 263-271 in the text.
 - (maybe?) Collaborative Learning Activity: Profit/Revenue/Cost Activity Exam
 - Preparation: In the week prior to your test,
 - review all notes;
 - re-read the assigned textbook pages;
 - re-work homework problems and Study Plan problems;
 - work MyMathLab Module Two Review Problems;
 - ask your instructor or an OCCC Math Lab staff member for help if you do not understand a concept

- MODULE THREE
 - Preparation:
 - (optional) MML Module Three Skill Check Quiz
 - (optional) MML Module Three Skill Check Follow-Up
 - Homework: Section 4.3 One-To-One and Inverse Functions
 - Assignment: Read and study pages 276-283 in the text.
 - (maybe?) Collaborative Learning Activity: Inverse Functions Activity 12

 - Homework: Section 5.1 Exponential Functions
 - Assignment: Read and study pages 312-320 in the text.
 - (maybe?) Collaborative Learning Activity: Introduction to Exponential Functions Activity

 - Homework: Section 5.2 Logarithmic Functions; Properties of Logarithms
 - Assignment: Read and study pages 324-336 in the text.
 - (maybe?) Collaborative Learning Activities:
 - Logarithmic Functions as Inverse to Exponentials Activity;
 - Doubling Time Activity

 - Homework: Section 5.3 Exponential and Logarithmic Equations
 - Assignment: Read and study pages 340-350 in the text.

 - Homework: MyMathLab Homework Section 5.5 Exponential Functions and Investing
 - Assignment: Read and study pages 371-368 in the text.
 - Assignment: Read MyMathLab Assignment "Module Three Section 5.pdf Exponential Rates (MA)" (This is also available in the text on pages 5A1-5A4, after page 408.)
 - (maybe?) Collaborative Learning Activity: Continuous vs. Annual Compound Interest Activity

 - Homework: MyMathLab Section 5.7 Logistic Functions
 - Assignment: Read and study pages 388-393 in the text.
 - (maybe?) Collaborative Learning Activities: Viral Video Activity Section 5.7 Epidemic Activity

 - Exam Preparation: In the week prior to your test,
 - review all notes;
 - re-read the assigned textbook pages;
 - re-work homework problems and Study Plan problems;
 - work MyMathLab Module Three Review Problems;
 - ask your instructor or an OCCC Math Lab staff member for help if you do not understand a concept.

- MODULE FOUR
 - Preparation:
 - (optional) MML Module Four Skill Check Quiz
 - (optional) MyMathLab Module Four Skill Check Follow-Up
 - Homework: Section **6.1a** Higher Degree Polynomial Functions & End Behavior
 - Assignment: Read and study pages 416-424 in the text.
 - (maybe?) Collaborative Learning Activity: Polynomial Graph Activity (End Behavior)

 - Homework: Section **6.1/6.3** Polynomial Zeros
 - Assignment: Read and study pages 443-450 in the text.
 - (maybe?) Collaborative Learning Activity: 6.1 Zeros/Multiplicity Activity

 - Homework: Regression Models (Sections **2.2, 3.4, 5.4, 6.2**) - Modeling Data as Linear, Quadratic, Exponential, Logarithmic, Cubic or Quartic
 - Assignment:
 - Read and study pages 109-113 over linear regression in the text.
 - Read and study pages 215-216 over quadratic regression in the text.
 - Read and study pages 354-357 and 361-364 over exponential/logarithmic regression.
 - Read and study pages 429-435 over cubic/quartic regression.
 - (maybe?) Collaborative Learning Activities:
 - Section 2.2 Linear Regression Activity
 - Section 5.4 Exponential Regression Activity
 - Combined Regression

 - Exam Preparation: In the week prior to your test,
 - review all notes;
 - re-read the assigned textbook pages;
 - re-work homework problems and Study Plan problems;
 - work MyMathLab Module Four Review Problems;
 - ask your instructor or an OCCC Math Lab staff member for help if you do not understand a concept.

- MODULE FIVE
 - Preparation:
 - (optional) MML Module Five Skill Check Quiz
 - (optional) MyMathLab Module Five Skill Check Follow-Up
 - Homework: Section **2.3** Two Variable Linear Systems
 - Assignment: Read and study pages 123-133 in the text.
 - (maybe?) Collaborative Learning Activity: Supply/Demand Activity
 - Homework: Section **7.1** Three Variable Linear Systems
 - Assignment: Read and study pages 498-506 in the text.
 - Homework: Section **7.2** Solving Linear Systems Using Matrices
 - Assignment: Read and study pages 508-517 in the text.
 - Homework: MyMathLab Homework Determinants and Cramer's Rule
Note: This assignment is sometimes skipped if time is short at the end of the course.
 - Assignment: Read MML document "Determinants and Cramer's Rule", found in Chapter Contents after section 7.5. This is also available in the textbook on pages 7A1-7A8, after page 561.)
 - (maybe?) Collaborative Learning Activity:
 - Exam Preparation: In the week prior to your test,
 - review all notes;
 - re-read the assigned textbook pages;
 - re-work homework problems and Study Plan problems;
 - work MyMathLab Module Five Review Problems;
 - ask your instructor or an OCCC Math Lab staff member for help if you do not understand a concept.