**MS 112 Precalculus Algebra (Dual Enrollment)**

**Fall 2018 CRN#12592**

**Syllabus**

**Instructor**: Sharron Gibson

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**Phone**: 205-594-7943

**Office Hours/Tutoring Hours**: Tuesday and Thursday 2:45 – 3:15 p.m., or by

 Appointment

**Room:** Ashville High School Rm. 103

**Times:**  M – Th 11:14 a.m. – 12:01 p.m. and F 11:57 – 12:39

**Course Prerequisite**:

MS 100 with a “C” or higher or an appropriate score on the EdReady Math Placement Test.

**Course Description and Goals:**

This course is designed to prepare students for success in Calculus. Topics to be covered are as follows: first and second degree equations and inequalities, linear and quadratic functions and graphs, polynomial and rational functions, exponential and logarithmic functions, and systems of equations.

**Course Materials:**

* Textbook is *Precalculus*, 2nd Ed. By Paul Sisson
* HAWKES – the accompanying online learning system (required component for this course)
* Scientific Calculator

**Grading:**

Test 1 – 100 points (10%) Date: 9/5/18

Test 2 – 100 points (10%) Date: 9/20/18

Test 3 – 100 points (10%) Date: 10/16/18

Test 4 – 100 points (10%) Date: 11/2/18

Test 5 – 100 points (10%) Date: 11/30/18

HAWKES, quizzes, etc. – 200 points (20%)

Final Exam – 300 points (30%) Date: 12/7/18

(\*Percentages and dates are subject to change.)

**Tentative Course Schedule:**

* 8/21 – 8/31 Real Numbers, Properties of Exponents & Radicals, Polynomials &Factoring,

 Complex Number System, and Linear Equations in One Variable

* 9/4 – 9/7 Linear Inequalities in One Variable, Quadratic Equations, Rational & Radical

Equations, The Cartesian Coordinate System

* 9/10 – 9/14 Linear Equations in Two Variables, Forms of Linear Equations, Parallel and

Perpendicular Lines

* 9/17 – 9/21 Linear Inequalities in Two Variables, Introduction to Circles, Relations and

Functions, Linear and Quadratic Functions,

* 9/24 – 9/28 Other Common Functions, Variation and Multivariable Functions,

 Transformations of Functions, Combining Functions

* 10/1 – 10/5 Inverse Functions and Introduction to Polynomial Equations and Graphs
* 10/11 – 10/12 Polynomial Division and the Division Algorithm
* 10/15 – 10/19 Locating Real Zeros of Polynomials, The Fundamental Theorem of Algebra,

 Rational Functions

* 10/22 – 10/26 Rational Functions and Rational Inequalities, Exponential Functions
* 10/29 – 11/2 Exponential Functions and Their Graphs, Applications of Exponential Functions

* 11/5 – 11/9 Logarithmic Functions and Their Graphs, Properties and Applications of

Logarithms, Exponential and Logarithmic Equations

* 11/13 – 11/16 Exponential and Logarithmic Equations, Solving Systems by Substitution and

Elimination, Matrix Notation and Gaussian Elimination

* 11/26 – 11/30 Conic Sections – The Ellipse, The Parabola, and The Hyperbola
* 12/3 – 12/7 Review for Final/**Final Exam**

**Additional Information/Course Policy:**

1. The class will meet M, Tu, W, Th and F. Success in this course requires that students attend class on a regular and punctual basis. Students are expected to be in attendance at all times.
2. Any student receiving a failing grade on any assignment or test is urged to meet with the instructor for extra help and/or tutoring.
3. Students may make-up missed assignments and tests only if the absence is excused.
4. All students are expected to be fully prepared for class each day. Cell phones and other electronic devices are not allowed during class.
5. Students should communicate with the instructor through email, Blackboard, Remind App, and/or during scheduled class time. To receive text messages via the Remind App, text the message @dems11 to the number 81010.
6. Students should adhere to the University policy for academic honesty and sexual harassment as specified in the JSU Handbook.
7. All assignments and assessments are to be individual efforts.
8. All forms of personal communication devices must be out of sight and in the power-off mode for class and testing periods. During a testing period in class, any use of a personal electronic communication device, without the prior consent of the instructor, constitutes prima-facie evidence of academic dishonesty with no right of grade appeal. If the instructor observes the device, the presumption is that cheating has occurred and a grade of “F” will be assigned for that exam, quiz, etc.
9. **The dates given as due date for assignments are tentative and may change due to time constraints.**

**Important Dates:**

8/21/18 First Day of Class

8/27/18 Payment Due Date and Last Day to Withdraw and Receive 100% Tuition Refund

10/18/18 Midterm Grades Due

10/26/18 Last Day to Drop without Academic Penalty

11/19/18 Last Day to Drop Passing or Withdraw with Academic Penalty

11/19 – 11/23/18 Thanksgiving Holidays

11/30/18 Last Day of Class

12/7/18 Final Exam

12/11/18 Grades Due