Math 139-002          Plane Analytic Geometry          Spring 2018
Tuesday & Thursday 9:30am-10:45am          Math 212

Professor Info
Dr. Matthew Beauregard
Email: beauregama@sfasu.edu
Website: http://faculty.sfasu.edu/beauregama/MTH139.html
Office phone: (936)-468-1702
Office Location: Math 354
Office Hours: Stop by or book an appointment at:
              https://calendly.com/drbeauregard

Course Materials
1. No textbook is required. Notes including definitions and questions will be provided. A binder to keep these notes and your work together is suggested. The notes can be accessed at:
   http://faculty.sfasu.edu/beauregama/CourseFiles/MTH139IBL.pdf

2. Calculators are not allowed on exams or in class.

3. Remind.com: Please text the message @mth139S18 to the number 81010.

Course Description
This course introduces material in plane analytic geometry emphasizing the correspondence between geometric curves and algebraic equations. This correspondence makes it possible to reformulate problems in geometry as equivalent problems in algebra, and vice versa. Curves studied include straight lines, circles, parabolas, ellipses, and hyperbolas. Coordinate transformations, polar coordinates, and parametric equations are also studied. The course assumes a sound background in algebra, geometry, and trigonometry.

Course Requirements
• Exploration, collaboration, and communication in class are essential for this class. Therefore, attendance is mandatory (in fact there is extra credit for it!) and active participation contributes to your grade.

• Homework: In this course we will learn about geometry by solving a carefully designed sequence of problems. In each class, I will assign a section of the notes and questions for students to prepare to turn in at the start of the next class. Selected problems will be graded for process, not just answers. For this reason, it is important to clearly communicate your work as well as the ideas and motivation necessary for the reader to understand your process. Because many of the homework problems will be presented in class, late homework is not allowed. **All homework should be done in pencil. Do not use pens.**

• Presentations & Participation: In class, we will have student presentations on the questions assigned for that day and we will discuss related ideas as well as any other relevant topics. We will also regularly work in small groups on problems to be presented and turned in at the next class meeting. You are expected to participate in these small group activities as they provide a wonderful way to gain a fuller understanding of what we are doing by communicating with others. Arrive on time (early) and prepared to participate in class.

• Examinations: Two in-class examinations will be given after we finish each of the first two chapters of materials. You will be notified of the date of the exam at least a week in advance. Exam makeups must be approved beforehand with documentation of a valid university sanctioned excuse.
Final Exam: There will be a 120 minute examination on Thursday, May 10th, 2018 in Math 212 from 8:00am-10:00am. The exam will be comprehensive.

Grading Policy

- Your final grade earned is determined by the scale: \( \geq 90\% \) A, \( 89 - 80\% \) B, \( 79 - 70\% \) C, D: \( 69 - 60\% \) D, \( \leq 59\% \) F. The grading categories and weights are:

<table>
<thead>
<tr>
<th>Daily Work</th>
<th>Presentations/Problem Solving/Homework</th>
<th>25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams</td>
<td>2 in-class exams</td>
<td>25% each</td>
</tr>
<tr>
<td>Final Exam</td>
<td></td>
<td>25%</td>
</tr>
</tbody>
</table>

Course Policies & Other Information

- **Attendance Policy:** You are expected to attend class. You are expected to be on time to class. You are expected to be an active participant in class. Class attendance will be taken daily. The table below offers the number of points based on the number of absences that will change your final grade.

<table>
<thead>
<tr>
<th>Total Absences</th>
<th>Change in Overall Grade (Points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>+3.0</td>
</tr>
<tr>
<td>1-2</td>
<td>+2.0</td>
</tr>
<tr>
<td>3-4</td>
<td>+1.0</td>
</tr>
<tr>
<td>5-6</td>
<td>+0.0</td>
</tr>
<tr>
<td>7-8</td>
<td>−3.0</td>
</tr>
<tr>
<td>&gt; 9</td>
<td>Automatic Failure</td>
</tr>
</tbody>
</table>

- Students are expected to respect the learning environment of their fellow students. **To this end, use of mobile phones, mp3 players, PDAs, etc., is forbidden during class. This is extremely distracting and any violation will result in a loss of recorded attendance for that day.**

- **Rules for collaboration:** You are allowed (and encouraged) to talk to me and other students about the ideas and problems in this course. This is true for homework as well as in class assignments, and you should write a note on your paper of other students you work with. The write-ups are to be done individually. Discuss the problems in a group, then write up your solutions by yourself. It is not OK for a group to work together, copy down the work, and turn in identical write-ups (even if the group all contributed equally). The individual understanding and writing is a very important part of your learning. You should not look for resources outside of this course for help (the notes, other students in this class, talking to me are all allowed). You should not consult the internet, other texts, and other students not in the class for instance. You may talk to other faculty on occasion but I would prefer if you regularly talked to me so you will get the most complete help based on this course.

- **Make-up Policies:** IF you miss an examination, have a valid and documented excuse, and have contacted me by email within 24 hours prior or after an examination THEN an exam date will be set for a makeup examination or the exam grade will be replaced by your final exam grade.

- **Communication:** I will send messages to the entire class during the semester through Remind or to your SFA email. You are responsible for all information discussed in class or contained in these electronic messages. I recommend you check your SFA e-mail account at least once a day. If you use a different email address consider forwarding your SFA email to that one. The
best way to reach me is through Remind and I will respond as quickly as I am able. The texts through Remind are private and are only seen by myself and you. Your phone number is not known and made available to me. If you are using the Remind App, you do have the option of texting other students in the class.

Making Your Homework Easy to Read and Easy to Grade

- Make sure your handwriting is legible. Your work should be done in pencil only.
- Homework with multiple pages should be stapled in the upper left-hand corner.
- In the upper right-hand corner you should write (in this order)
  - Your name
  - MTH 139 002
  - The homework set number
  - The due date of the homework
- Questions should be clearly labeled and numbered on the left side of the page. There should also be a visible separation between problems. *Dont forget to staple your homework together if you are submitting several pages.*
- You should leave the entire left margin blank so that the grader can use this space for scoring and comments.
- To ensure that each problem is graded, problems and solutions should be written in the order that they are assigned.
- It is good practice to first work out the solutions to homework problems on scratch paper, and then to neatly write up your solutions. This will help you turn in a clean finished product.
- You should write up your solutions by yourself. You should always acknowledge any help received at the top of the assignment or in the right-hand margin.

Homework Grading Rubric

Homework will be graded on a scale of 0 to 3. (I reserve the right to assign 4 points to an exceptionally well written homework set!) You should not think of the grade of an individual assignment as representing a percentage of questions that you got the right answer for, but rather as delivering a message about the problem solving process:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Student work is complete, including justification or explanation of the processes in solving problems. The work may not be completely correct but the work demonstrates a good line of reasoning.</td>
</tr>
<tr>
<td>2</td>
<td>Student work is mostly complete and all problems have been attempted including some justification or explanation of the process of solving the problem.</td>
</tr>
<tr>
<td>1</td>
<td>Student work is incomplete, lacking explanations, or not an adequate attempt at solving problems.</td>
</tr>
<tr>
<td>0</td>
<td>Student work is missing or does not represent an adequate attempt at solving problems.</td>
</tr>
</tbody>
</table>

Remember that your Presentations/Problem Solving/Homework grade will include points for presenting and working on problems at the board. In general, you should be getting more problems properly solved and justified than not in order to pass this class.
• **Acceptable Student Behavior:** Classroom behavior should not interfere with the instructors ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

• **Academic Integrity (A-9.1):** Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.
  
  **Definition of Academic Dishonesty:** Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one’s own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one’s paper without giving the author due credit.

  Please read the complete policy at http://www.sfasu.edu/policies/academic_integrity.asp

• **Withheld Grades Semester Grades Policy (A-54):** Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average. The circumstances precipitating the request must have occurred after the last day in which a student could withdraw from a course. Students requesting a WH must be passing the course with a minimum projected grade of C.

• **Students with Documented Disabilities:** To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/.