Department of Mathematics, Computer and Information Sciences Mississippi Valley State University *MA 311-1 Geometry* Fall 2022

College	Department	Course #
Arts and Sciences	MCIS	MA 311-1
Instructor	Class Meetings-Location/Time:	Office Location:
Dr. Jinglong Ye	T/TR 3:50 – 5:05 pm CRB 206	CRB 111 C
Office Phone:	E-mail Address:	Office Hours:
254 - 3293	Jinglong.ye@mvsu.edu	M/W: 9:00-10:00am, 3:00-4:00pm TR: 8:00-11am (WCONLINE) TR: 2:00-3:40pm F: 9:00-10:00am

Text: Analytic Geometry, Douglas F. Riddle, 6th, PWS publishing company, 1996

Course Credit: 3 hours

Prerequisites: It is preferred that students would have College Algebra.

Purpose

Analytical Geometry provides necessary foundation and techniques in Geometry for students who need preparation for teaching licenses. Students are expected to read extensively from the textbook and spend a considerable amount of time solving problems. This course will help students use and understand mathematics more effectively as a problem-thinking-solving tool in their personal and professional lives. A combination of exercises and activities will be included to help all students acquire certain skills that must be embedded in every potential holistic transformer. Topics will be taken from chapters throughout rather than chapter by chapter coverage.

Course Objectives and Goals

1. To provide students with adequate exposure and subject matter to prepare them for a more in-debt study of advanced mathematics courses.

- 2. To help students develop their critical thinking, technological and writing skills.
- 3. To help students develop computational skills in geometry
- 4. To help students develop some knowledge of application of integrations and

differentiations in solving physical sciences and engineering

5. To help students obtain the ability to use Sketchpad

Course Content:

- 0. Introduction to the Graphing Calculator.
- 1. Plane Analytic Geometry
- 2. Vectors in the Plane
- 3. The Line
- 4. The Circle
- 5. Conic Sections
- 6. Transformation of Coordinates
- 7. Curve Sketching
- 8. Polar Coordinates and Parametric Equations

Teaching Methods

The method used to accomplish the goals and objectives of this course include a combination of lectures, demonstrations, class discussions, use of technology and group activities.

Textbook

The textbook(s) for this course are available on Reserve at the Circulation Desk at the James H. White Library for a 2-hour loan period (books must stay in the Library). Please take advantage of this resource, but keep in mind that copies of textbooks for each course are limited and may be in use by another student, particularly right before an assignment or reading is due, so plan your textbook use accordingly.

Course Requirements

- Students are expected to attend class, take notes, and carefully complete all homework assignments and submit them when due. Incomplete or late assignments will not be accepted.
- Students are strongly encouraged to participate in all class activities.
- Failure to make up an exam will result in a grade of zero.
- □ Students are expected to pass written examinations based on classroom lectures and homework assignments.
- Any individualized problems should be discussed in the office and not in the classroom.
- **<u>DO NOT</u>** wait until the end of the semester to ask for help. Use my office hours, as well as tutors, if and when you may need extra practice.

Evaluation Criteria

The evaluation methods, with exception to the homework and final exam, may vary with instructors. (See Homework and Final Exam below)

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Classroom Activities	
Homework/quizzes	40%
Midterm, Final Exams	

Course Outline: Subject to some changes depending on the needs and level of the class			
Week	Contents	Exams	
Week 1 08/22 - 08/26	1.1, 1.2, 1.3		
Week 2 08/29 – 09/2	1.4, 1.5, 1.6		
Week 3 09/5 – 09/9	1.7,1.8		
Week 4 09/12 – 09/16	2.1, 2.2		
Week 5 09/19- 09/23	2.3, 3.1, 3.2		
Week 6 09/26 - 09/30	3.3, 3.4		
Week 7 10/3–10/7	Review and Midterm Exam	Midterm Exam	
Week 8 10/10 - 10/14	4.1, 4.2		
Week 9 10/17 – 10/21	5.1, 5.2		
Week 10 10/24 – 10/28	5.3, 5.4		
Week 11 10/31 - 11/4	5.5, 6.1		
Week 12 11/7 – 11/11	6.2, 6.3		
Week 13 11/14 – 11/18	6.4, 7.2, 7.3		
Week 14 11/21 – 11/25		Thanksgiving	
Week 15 11/28-12/2	Review		
Week 16 12/5-12/9	Final Exam	Final Exam	

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Missed Homework/Quizzes

No make-up on missed quizzes/homework.

Final Exam

The final exam is a comprehensive examination consisting of all topics covered.

Attendance Policy

It is necessary for students to attend every class meeting. Any student who misses more than the allowed number (3) of absences will be subject to a decrease in their final grade.

SSD/Special Needs Statement

Students having any special needs (handicaps, problems, or any factors that may affect their performance in class or require special instructional strategies) should make these special needs known to the instructor during the first week of the course. The instructor meets with the student to insure access of available resources in the university and make appropriate instructional modifications.

ADA Syllabus Statement

Mississippi Valley State University is committed to providing reasonable accommodations for students with a documented disability. If a student has a disability that qualifies under the Americans with Disability Act (ADA) and requires accommodations, he/she should contact the Services for Students with Disability Office to obtain this service. Disabilities covered by the ADA may include learning, physical, psychiatric, vision, hearing, or chronic health disorders. Students who are uncertain if their condition/disability is qualified should contact the SSD Office.

Mrs. Kathy Brownlow/ ADA Coordinator Social Science Building Office 105 Phone/e-mail: 662-254-3443, <u>kbrownlow@mvsu.edu</u>.

Beepers or Telephones

The volume of telephones and beepers must be turned **off/vibrate** if you have these items with you in class. The noise is distracting not only to the instructor but to your classmates as well.

NOTE: Failure to adhere to any of the preceding statements could cause a decrease in the FINAL GRADE!!!!!!

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