

**MA 3163: Introduction to Modern Algebra**  
**Course Syllabus**  
**Spring 2016**

**Section 01**  
**MWF: 9:00 - 9:50 am**  
**Allen 19**

**Instructor:** Dr. Matt McBride  
**Office:** Allen 419  
**Office Phone:** 325-7139  
**Office Hours:** MWF: 10:00 – 11:00 am or by appointment  
**Email Address:** mmcbride@math.msstate.edu  
**Website:** msm646.math.msstate.edu

**Textbook:** Gallian, Joseph: *Contemporary Abstract Algebra*, 8<sup>th</sup> Edition

**Prerequisites:** MA 3113 and MA 3053

**Objective:** Abstract algebra is one of the main areas in mathematics that has lots of applications to other areas in mathematics and not just algebra. Algebra can be broken up into three main parts: groups, rings, and fields. We will study a broad spectrum of each piece through out this course.

**Withdrawl Date:** The last day to drop the course with a W is March 1<sup>st</sup>.

**Student Honor Code:** Mississippi State has an approved Honor Code that applies to all students. The code is as follows: “As a Mississippi State University student, I will conduct myself with honor and integrity at all times. I will not lie, cheat, or steal, nor will I accept the actions of those who do.” Upon accepting admission to Mississippi State University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor Code. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the MSU community from the requirements or the processes of the Honor Code. For additional information, please visit: <http://honorcode.msstate.edu/policy>

**Students with disabilities:** Mississippi State University is committed to providing reasonable accomodation for all students with disabilities. If you require special accomodation in this course you are requested to speak with the instructor as early in the semester as possible. Students with disabilities must be registered with the Office of Student Support Services prior to receiving accomodations in this course. For further information please see <http://www.sss.msstate.edu>.

**Title IX:** Mississippi State University is committed to complying with Title IX, a federal law that prohibits discrimination, including violence and harassment, based on sex. This means that MSU's educational programs and activities must be free from sex discrimination, sexual harassment, and other forms of sexual misconduct. If you or someone you know has experienced sex discrimination, sexual violence and/or harassment by any member of the university community, you are encouraged to report the conduct to MSU's Director of Title IX/EEO Programs at 325-8124 or by email to [titleix@msstate.edu](mailto:titleix@msstate.edu). Additional resources are available at <http://www.msstate.edu/web/security> or at <http://students.msstate.edu/sexualmisconduct/>.

**Homework:** As with any math course, homework is a vital component. One must practice newly learned facts, theorems, etc. through the assigned homework. Homework will be assigned more or less daily, however it will be collected only once a week except during exam weeks. See the schedule for details.

**Exams:** There will be two closed book, closed notes, and closed homework in-class exams. Students will have the whole class period to take the exams. See the schedule for the exact chapters covered.

**Final Exam:** The final exam is **not** a comprehensive exam and will be held on **Wednesday, May 4<sup>th</sup>** in the usual class location at **8:00 - 11:00 am**. This date can **not** be modified, so make sure one's calendar is free.

**Make-up Policy:** Make-up exams will be given **only** for reasons deemed acceptable by the instructor, and **only** with written documentation. Make-up exams must be taken within one week of the original date, and no make-ups may be taken after the final exam. Make-up exams are never easier than the original.

**Calculator Policy:** You may use any type of calculator you wish, however given the nature of the problems you won't need a calculator.

**Grading Distribution:**

Homework.....	25%
Exams.....	50%
Final Exam.....	25%
Total.....	100%

**Grading Scale:**

<b>A:</b> .....	100% - 90%
<b>B:</b> .....	89% - 80%
<b>C:</b> .....	79% - 70%
<b>D:</b> .....	69% - 60%
<b>F:</b> .....	59% and below

**Spring 2016 Tentative Schedule**

Note: this may be modified and is left to the discretion of the instructor.

<b>Date</b>	<b>Chapters Covered/ HW Due</b>	<b>Homework Assigned</b>
Mon, Jan. 11	0	<b>0:</b> 1-5,8,12
Wed, Jan. 13	2	none
Fri, Jan. 15	2,3	<b>2:</b> 9,15,19,25,26,39
Wed, Jan. 20	3	<b>3:</b> 18,20,32,33,76
Fri, Jan. 22	4 ( <b>Chp 0,2 due</b> )	none
Mon, Jan. 25	4,5	<b>4:</b> 1,8,13,21,22,35,64
Wed, Jan. 27	5	<b>5:</b> 1,3,13,42
Fri, Jan. 29	6 ( <b>Chp 3 due</b> )	none
Mon, Feb. 1	6	<b>6:</b> 6,8,10,11,22,35,51
Wed, Feb. 3	7	none
Fri, Feb. 5	7 ( <b>Chp 4,5 due</b> )	<b>7:</b> 3,7,11,17,30
Mon, Feb. 8	8	none
Wed, Feb. 10	8,9	<b>8:</b> 7,17,63,65
Fri, Feb. 12	9 ( <b>Chp 6,7 due</b> )	<b>9:</b> 5,11,13,39,48,65
Mon, Feb. 15	10	none
Wed, Feb. 17	Review for Exam 1	none
Fri, Feb. 19	<b>Exam 1</b>	<b>Covering: Chp 0,2-9</b>
Mon, Feb. 22	10,11	<b>10:</b> 7,9,11,13,16,58,59
Wed, Feb. 24	11	<b>11:</b> 6,7,8
Fri, Feb. 26	12 ( <b>Chp 8,9 due</b> )	<b>12:</b> 1,8,9
Mon, Feb. 29	13	<b>13:</b> 4,11,57

<b>Date</b>	<b>Chapter Covered/ HW Due</b>	<b>Homework Assigned</b>
Wed, Mar. 2	14	none
Fri, Mar. 4	14 ( <b>Chp 10,11,12 due</b> )	<b>14:</b> 10,14,16,39,55,56
Mon, Mar. 7	15	none
Wed, Mar. 9	15	<b>15:</b> 13,14,47,56
Fri, Mar. 11	16 ( <b>Chp 13,14 due</b> )	none
Mon, Mar. 21	16	<b>16:</b> 1,11,13,47
Wed, Mar. 23	17( <b>Chp 15 due</b> )	none
Mon, Mar. 28	17	<b>17:</b> 5,8,9,26
Wed, Mar. 30	Review for Exam 2	none
Fri, Apr. 1	<b>Exam 2</b>	<b>Covering: Chp 10-16</b>
Mon, Apr. 4	18	none
Wed, Apr. 6	18	<b>18:</b> 15,20,34
Fri, Apr. 8	19 ( <b>Chp 16,17 due</b> )	<b>19:</b> 2,24,29,31
Mon, Apr. 11	20	none
Wed, Apr. 13	20	none
Fri, Apr. 15	20 ( <b>Chp 18,19 due</b> )	<b>20:</b> 2-5,8,10,38
Mon, Apr. 18	21	none
Wed, Apr. 20	21	<b>21:</b> 7,14,24,26,35,38
Fri, Apr. 22	32 ( <b>Chp 20 due</b> )	none
Mon, Apr. 25	32	<b>32:</b> 6,7,12,13,18,22,23
Wed, Apr. 27	Review for Final Exam	none
Wed, May 4	<b>Final Exam</b> ( <b>Chp 21,32 due</b> )	<b>Covering: Chp 17-21,32</b> <b>8:00-11:00am in Allen 19</b>