Email Policy

Email is the official means of communication at Westminster College. Please feel free to contact me via email, but be sure that you email the correct Dr. Richardson! All messages received after 4:00PM may not be answered until the following day.

Prerequisite

This course has prerequisite of MTH 361.

Text


Course Description:

This course is a continuation of MTH 361, Abstract Algebra; it will focus on gaining a deeper understanding of groups, rings, and fields as well as understanding how abstract algebra may be applied to other branches of mathematics. Topics will be chosen from Sylow theory, finite abelian groups, group actions, group automorphisms and isomorphisms, solvable, simple, and nilpotent groups, group rings, Euclidean domains, Unique Factorization Domains, Principle Ideal Domains, vector spaces, inner product spaces, field extensions, and Galois theory.

Student Learning Outcomes:

By the end of the semester, students must demonstrate the ability to

• Interpret and employ the appropriate vocabulary and notation used in algebra.
• Accurately describe the fundamental theorems in algebra covered in this course.
• Correctly apply theorems and definitions to prove new theorems and solve new problems.
• Construct proofs, including direct proofs, proofs by contradiction, proofs by contrapositive, and if-and-only-if proofs.

Homework:

Homework problems will be assigned after each meeting and may include both problems from the textbook as well as supplementary problems that I design for the course. Solutions will be discussed at the following meeting.

Exams:

There will be two oral examinations given during the course. The dates of these exams will be agreed upon at least one week prior to the occurrence of the exam.

Course Grades:

Your course grade will be determined by the following distribution:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>40%</td>
</tr>
<tr>
<td>Exams</td>
<td>30% each</td>
</tr>
</tbody>
</table>

The grading scale will be

- B+ : 88-89
- C+: 78-79
- D+: 68-69
- A: 92-100
- B: 82-87
- C: 72-77
- D: 62-67
- F: 0-59
- A-: 90-91
- B-: 80-81
- C-: 70-71
- D-: 60-61

Academic Integrity:

Central to the purpose and pursuit of any academic community is academic integrity. All members of the Westminster community, including students, faculty, staff, and administrators, are expected to maintain the highest standards of honesty and integrity, in keeping with the philosophy and mission of the College.

Westminster College 2017-18 Undergraduate Catalog, p. 65

Some forms of academic dishonesty include (but are not limited to): copying a classmate’s work (homework, extra credit, or exams), divulging answers or information to another student during or about an exam, and using unauthorized aids (e.g., professors, textbooks, internet sites) on an assignment or exam. Please note that presenting a solution found online as your own work is plagiarism. Academic dishonesty will not be tolerated in this class. The penalty for academic dishonesty is a grade of 0 on the assignment. Any event of academic dishonesty is reported to the Dean of the College. Other details of violations and consequences are given in the Catalog.
Students with Disabilities:

Westminster College actively strives for the full inclusion of all our students. Students with disabilities who require access solutions for environmental or curricular barriers should contact Faith Craig, Director of Disability Resources, located in 209 Thompson-Clark Hall. You may reach her at 724-946-7192 or craigfa@westminster.edu. No accommodations can be given without documentation from the Disability Resources Office.