SYLLABUS
Winter 2010

Course: Math 616–Studies in Mathematics
Prerequisite: Math 546 and admission to M.A. in Mathematics program
Text: Galois Theory
Second Edition
Joseph Rotman
1998 Springer-Verlag
Time/Place: MW 4:00-5:50 p.m.
JB 387
Instructor: Zahid Hasan
Office/Phone: JB 325 537-5369
Email: zhasan@csusb.edu
Office Hours: MW – 9:15-10:35 a.m.,
MW – 3:15-3:55 p.m.,
or by appointment.

Material to be Covered:
Familiarity with the topics covered in Math 546 will be assumed. These topics include: rings, integral domains, fields, homomorphisms, ideals, quotient rings, polynomial rings, irreducible polynomials, prime and maximal ideals. We will cover these topics, at a fast pace, along with the main topics of the course, which include field extensions, the Galois group, Galois extensions, solvability of equations by radicals, The fundamental theorem of Galois theory and its application including constructibility of regular n-gons.

Homework:
Homework will be assigned and collected 7 times during the quarter. Each collected problem set will be graded on a scale of 0 to 20, where the point value of each problem will be from 1 to 10 according to the difficulty and/or importance of the problem. At the end of the quarter, the homework scores will be averaged by taking the best 5 scores.
Tests:
We will have two tests and a "comprehensive" final exam. 
You may use the final exam percent score to replace your lower test score.

Test Dates:

February 8
March 3

Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Final</td>
<td>30%</td>
</tr>
<tr>
<td>Tests</td>
<td>50%</td>
</tr>
<tr>
<td>Homework</td>
<td>20%</td>
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The class grade will be determined as follows:-
90-100% an A, 88-89% an A−, 86-87% a B+, 80-85% a B,
78-79% a B−, 75-77% a C+, 66-74% a C, 60-65% a C−,
57-59% a D+, 53-56% a D, 50-52% a D−, and 0-49% an F.

If you must miss a test, let me know in advance. Makeups for tests
will not be given without serious and compelling reasons for your
absence from the class. Please leave me a self-addressed, stamped
envelope on the day of the final exam, if you want me to notify you
of your grades.

Important Dates:
January 18 Campus Closed (Matin Luther King Holiday)
February 1 is the last day to drop a class without record.
February 12 Campus Closed (State Budget Closure Day)
February 17 No classes or office hours (my furlough day)
March 2 Campus Closed (State Budget Closure Day)
Final Exam: Wednesday, March 24, 4:00–5:50 p.m.