Class Schedule - Spring 2014

Mathematics

MATH 418  Intro to Abstract Algebra II  credit: 3 OR 4 hours.
Rings of quotients of an integral domain. Euclidean domains, principal ideal domains. Unique factorization in polynomial rings. Fields extensions, ruler and compass constructions. Finite fields with applications. Modules. Structure theorem for finitely generated modules over principal ideal domains. Application to finitely generated abelian groups and canonical forms of matrices. Introduction to error-correcting codes. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 417 or consent of instructor.

<table>
<thead>
<tr>
<th>CRN</th>
<th>Type</th>
<th>Section</th>
<th>Time</th>
<th>Days</th>
<th>Location</th>
<th>Instructor</th>
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</thead>
<tbody>
<tr>
<td>39475</td>
<td>Lecture-Discussion</td>
<td>C13</td>
<td>10:00 AM - 10:50 AM</td>
<td>MWF</td>
<td>140 - Henry Administration Bldg</td>
<td>Boca, F</td>
</tr>
</tbody>
</table>

Credit Hours: 3 hours
Open to both undergraduate and graduate students.

| 39476| Lecture-Discussion | C14     | 10:00 AM - 10:50 AM | MWF  | 140 - Henry Administration Bldg | Boca, F    |

Credit Hours: 4 hours
Instructor Approval Required
Not intended for Undergrad - Urbana-Champaign.
Instructor approval forms available in 313 Altgeld Hall.