# Mathematics

**MATH 416  ** **Abstract Linear Algebra**  credit: 3 OR 4 hours.

Rigorous proof-oriented course in linear algebra. Topics include determinants, vector spaces over fields, linear transformations, inner product spaces, eigenvectors and eigenvalues, Hermitian matrices, Jordan Normal Form. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Credit is not given for both MATH 416 and either MATH 410 or MATH 415. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 241 or consent of instructor; MATH 347 is recommended.

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<th>Type</th>
<th>Section</th>
<th>Time</th>
<th>Days</th>
<th>Location</th>
<th>Instructor</th>
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<td>Lecture-Discussion</td>
<td>B13</td>
<td>09:00 AM - 09:50 AM</td>
<td>MWF</td>
<td>241 - Altgeld Hall</td>
<td>Mueller, S Whittlesey, K</td>
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Credit Hours: 3 hours
The math major restriction will be removed during the day of December 2, 2014. Other students are welcome to add the course once the restrictions are removed.

Credit Hours: 4 hours
Departmental Approval Required
Restricted to Graduate - Urbana-Champaign.

Instructor approval forms available in 313 Altgeld Hall beginning on the first day of spring semester.
<table>
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Credit Hours: 3 hours
Departmental Approval Required
Not intended for Graduate - Urbana-Champaign.
This is an honors section for undergraduates who are excellent in mathematics. Interested students with A's in previous math courses should e-mail mathadvising@illinois.edu with name, UIN, and reason for wanting the class.

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Departmental Approval Required
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