MATH 423  **Differential Geometry**  credit: 3 OR 4 hours.

(MATH 323) Applications of the calculus to the study of the shape and curvature of curves and surfaces; introduction to vector fields, differential forms on Euclidean spaces, and the method of moving frames for low-dimensional differential geometry. 3 undergraduate hours. 3 or 4 graduate hours. 4 hours of credit requires approval of the instructor and completion of additional work of substance. Prerequisite: MATH 242 or MATH 243, or equivalent.

This course satisfies the General Education Criteria for a:
Quantitative Reasoning II

<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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<tbody>
<tr>
<td>30352</td>
<td>Lecture-Discussion</td>
<td>N13</td>
<td>10:30 AM - 11:50 AM</td>
<td>TR</td>
<td>445 - Altgeld Hall</td>
<td>Alexander, S</td>
</tr>
</tbody>
</table>

Credit Hours: 3 hours
Quant Reasoning II course.

| 39127  | Lecture-Discussion   | N14     | 10:30 AM - 11:50 AM | TR   | 445 - Altgeld Hall | Alexander, S |

Credit Hours: 4 hours
Quant Reasoning II course.
Instructor Approval Required
Restricted to Graduate - Urbana-Champaign.