Mathematics

MATH 525  Topology  credit: 4 hours.

(MATH 430) Winding numbers, singular and de Rahm homology and cohomology in dimension zero and one, fixed point theorems, Jordan curve theorem, covering spaces, fundamental groups, classification of surfaces, van Kampen Theorem, singular homology, Eilenberg-Steenrod axioms, homology groups of surfaces. Prerequisite: MATH 417 and MATH 448 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>30821</td>
<td>Lecture-Discussion</td>
<td>X1</td>
<td>12:00 PM - 12:50 PM</td>
<td>MWF</td>
<td>347 - Altgeld Hall</td>
<td>Rezk, C</td>
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