MATH-416  Analysis on groups
Monod Nicolas

Summary
We study analytic phenomena on groups, notably paradoxical decompositions and fixed point properties.

Content
Paradoxical decompositions
Fixed point theorems
Harmonic analysis

Learning Prerequisites
Recommended courses
Topology I, II

Learning Outcomes
By the end of the course, the student must be able to:
• The students will demonstrate a deep understanding of the concepts introduced in the lecture. They will understand paradoxicality. They will prove fundamental results. Rigor is a paramount skill to be demonstrated and creativity a key asset to be displayed.

Teaching methods
Ex cathedra lecture and exercises in the classroom

Expected student activities
• Follow the lectures
• Attend the exercise sessions
• Attempt to solve all exercises and write up the result of these attempts
• Work over the lecture

Assessment methods
Exam oral

Dans le cas de l’art. 3 al. 5 du Règlement de section, l’enseignant décide de la forme de l’examen qu’il communique aux étudiants concernés.

Supervision

Analysis on groups
<table>
<thead>
<tr>
<th>Feature</th>
<th>Status</th>
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<tbody>
<tr>
<td>Office hours</td>
<td>Yes</td>
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<td>Assistants</td>
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<td>Forum</td>
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