PRESENTATION TOPICS:

1. Split Extensions (pages 86-89)*[JSC]
2. Classification of Extensions with abelian kernel (pages 91-94)*[SM]
3. Complete Resolutions (pages 131-133)*[ZT]
4. Introduction to Tate cohomology (pages 134-141)*[DK]
5. Groups with periodic Cohomology (pages 153-159)*[ES]
6. Computation of $vcd(SL_n(\mathbb{Z}))$ (pages 213-217)*[AD]
7. On the homology of Lie groups made discrete (paper by J. Milnor in Comment. Math. Helvetici 58 (1983) p. 72-85)*[SH]
8. The Hochschild-Serre spectral sequence (168-172)*[ET]
9. Euler characteristic of groups (pages 246-253)*[EJ]
10. Introduction to Farrell cohomology (pages 273-280)

* means that the topic is taken
**presented

EXTRA CREDIT:

Credit for *-problems will be given to first 4 persons who bring a correct solution to my office. Then the problem will be removed from the list.

Problem 1*[# of claims left - 4](4pts) Prove that for any n the kernel of the homomorphism $GL_n(\mathbb{Z}) \to GL_n(\mathbb{Z}/p\mathbb{Z})$ is torsion free for $p > 2$.

Problem 2*[# of claims left - 4](4pts) Prove that $H_2(G) = 0$ for any finite subgroup $G \subset S^3$.