

MAT4540 SYLLABUS, FALL 2023

The basic syllabus is what has been covered in the lectures: Chapter 3 (§§3.1–3.3) and Chapter 4 (§§4.1–4.2) of Hatcher, and Chapter 2 on spectral sequences from the notes posted on the course webpage.

Note: The material you presented for the mandatory assignment will not be asked about during the exam.

We have skipped some examples and results. The following is excluded from the syllabus:

- From Hatcher §3.2: Examples 3.8, 3.9. From Prop. 3.22 and rest of §3.2.
- From Hatcher §3.3: From Example 3.41 and rest of §3.3.
- From Hatcher §4.2: The “general Hurewicz theorem” (Theorem 4.37) and the section “The plus construction”.
- From Chapter 2 of the spectral sequence notes: §2.3, §2.5, §2.10, §2.12.