

1617-257 Post Mortem

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I/we should have been clearer / tougher about prerequisites.

In "About", I should have emphasized that the course material is whatever is in class, not whatever is in the book. In particular, "if you think you can read the book instead of attending classes, you are making a terrible mistake".

I wonder if there is a better book?

HW should have started on week 1.

Could I have skipped chapter 15, improper integrals?

I should have skipped non-form integration on manifolds altogether (sections 21, 22, 25). Once integration relative to volume is introduced, it is hard to motivate "why do we need another integration theory". Yet forms are very easy to motivate as "that most general thing which is integrable on a manifold".

Even better, manifolds should have been altogether skipped in favour of "cycles". Who uses embedded manifolds anyway?

Run by Mary - perhaps I should have added somewhere in the "About" document: "A major challenge is that this class has a different attitude towards rigour than, say, 157 or 240/247. In 157/240/247 everything was rigorous, and rigour was (almost) always displayed on the board; almost every proof was written to the last detail. In this class we already assume that you, the students, are fully capable of completing many details on their own, including some details that might have appeared quite major last year. Thus in 257 everything is rigorous, yet rigour is often in your mind and following hours of work, and not simply manifested on the blackboard. It won't be easy!".

I should have motivated wedge products of forms better, or eliminated them.