

PRESENTATION TOPICS

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These are suggestions for in-class 50 minutes presentations, to be updated.

1. Flat manifolds and Bieberbach Theorems (e.g. following P. Buser's expository paper)
2. Sard's theorem
3. What is a foliation? (many sources available, Conlon-Candel book)
4. Poincaré-Bendixon Theorem (many sources available)
5. Existence and Uniqueness Theorem for ODE (many sources, Conlon appendix C)
6. Whitney embedding theorem (Conlon)
7. The Morse Lemma (Conlon)
8. Handlebody decomposition (many sources e.g. Scorpan, Milnor)
9. Ehresman's theorem (a proper submersion is a fibration, Peterson's book)