Course Introduction:
Evaluation and Metrics

Metrics and Evaluation

- What algorithm works best?

- Matching recommenders to desired outcomes
  - What are recommenders being used for anyway?

- Optimization

Key Concepts

- Metrics
  - Accuracy, Decision Support, Rank, others
- Evaluation without users
  - Evaluating offline data
  - Framework for hidden-data evaluation
- Evaluation with users
  - Lab and Field Experiments (A/B Trials)
  - User Surveys, Log Analysis

Course Structure

- Basic Prediction and Recommendation Metrics (wk 1)
  - Assignment (implement in spreadsheet)
  - Quiz
- Advanced Metrics and Offline Evaluation (weeks 2-3)
  - Honors Assignment (implement in LensKit)
  - Quiz
- Online Evaluation (week 4)
  - Quiz
- Design Assignment (weeks 2-4)
  - Peer-graded evaluation design (warm-up for Capstone)

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