

Plano de Ensino – 2024/2

Código	DCC030 / DCC049 / DCC831
Disciplina	TCC / TSI / TECC: SISTEMAS DE RECOMENDAÇÃO
Turma	
Professor	Rodrygo Luis Teodoro Santos

Pré-requisito: DCC205 - Estruturas de Dados

Ementa: The focus of this course is on the design, implementation, and evaluation of recommender systems.

Programa

Class	Content	Activities
1	Introduction	
2	Characterization	
3	Non-personalized collaborative filtering	> RC1
4	Nearest neighbor collaborative filtering	
5	Evaluation methods	
6	Evaluation metrics	
7	Matrix factorization	
8	Implicit matrix factorization	
9	Restricted Boltzmann machines	
10	Multi-armed bandits	
11	Exam #1	
12	RC1 development	< RC1
13	RC1 presentations	
14	Content-based recommendation	
15	Diversity and novelty	
16	Knowledge-based recommendation	
17	Explanations	
18	Hybridization	
19	Context-aware recommendation	> RC2

20	Factorization machines	
21	Deep learning	
22	Generative learning	
23	Seminars	
24	Seminars	
25	Seminars	
26	Seminars	
27	Exam #2	
28	RC2 development	< RC2
29	RC2 presentations	
30	Replacement exam	

Bibliografia

1. [*Recommender Systems: An Introduction*](#), Dietmar Jannach, Markus Zanker, Alexander Felfernig, Gerhard Friedrich. Cambridge University Press, 2010.
2. [*Recommender Systems Handbook*](#), Francesco Ricci, Lior Rokach, Bracha Shapira, Paul B. Kantor. Springer, 2015.
3. [*Recommender Systems: The Textbook*](#), Charu C. Aggarwal. Springer, 2016.
4. [*Statistical Methods for Recommender Systems*](#), Deepak K. Agarwal, Bee-Chung Chen. Cambridge University Press, 2016.
5. [*Practical Recommender Systems*](#), Kim Falk. Manning, 2019

Avaliações (tentativo)

1	Exam #1	25 pontos
2	Research challenge #1	20 pontos
3	Paper seminars	10 pontos
4	Exam #2	25 pontos
5	Research challenge #2	20 pontos