

Plano de Ensino – 2022/2

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	Date	Content	Activities
1	ter 23/08	Introduction	
2	qui 25/08	Characterization	
3	ter 30/08	Non-personalized collaborative filtering	> RC1
4	qui 01/09	Nearest neighbor collaborative filtering	
5	ter 06/09	Evaluation methods	
6	qui 08/09	Evaluation metrics	
7	ter 13/09	Matrix factorization	
8	qui 15/09	Restricted Boltzmann machines	
9	ter 20/09	Implicit matrix factorization	
10	qui 22/09	Multi-armed bandits	
11	ter 27/09	RC1 presentations	< RC1
12	qui 29/09	RC1 presentations	
13	ter 04/10	Exam #1	
14	qui 06/10	Content-based recommendation	
15	ter 11/10	Topic modeling	
16	qui 13/10	Diversity and novelty	
17	ter 18/10	Knowledge-based recommendation	
18	qui 20/10	Explanations	
19	ter 25/10	Hybridization	
20	qui 27/10	Context-aware recommendation	
21	ter 01/11	Factorization machines	> RC2
22	qui 03/11	Deep learning	

23	ter 08/11	Deep learning	
24	qui 10/11	Exam #2	
--	ter 15/11	Holiday	
25	qui 17/11	Seminars	
26	ter 22/11	Seminars	
27	qui 24/11	Seminars	
28	ter 29/11	RC2 presentations	< RC2
29	qui 01/12	RC2 presentations	
30	ter 06/12	Resit 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	Research challenge #1	20 pontos	26/09
2	Exam #1	25 pontos	04/10
3	Exam #2	25 pontos	10/11
4	Research challenge #2	20 pontos	28/11
5	Paper seminars	10 pontos	17-24/11