DSC441: Fundamentals of Data Science
Spring Quarter AY: 2024 – 2024 - Tentative Schedule

Textbook:

Data Mining: Concepts and Techniques, by Han and Kamber and Pei, Morgan Kaufman Publishers, Third Edition

Date	Agenda	Homework/Quizzes Due (start of week)
Modules 0 & 1 Week 1 04/01/2024	• Syllabus, Goals & Overview of the course topics • Introduction • Data Part I (Storage & Variables)	Module #0 and #1 quizzes are assigned.
Module 2 Week 2 04/08/2024	• Data Part II	Module #1 Quiz is due. Module #2/3 Quiz is assigned. **Homework # 1 is assigned.**
Module 3 Week 3 04/15/2024	• Data Part III	Module #3 Discussion: Binning is assigned.
Sunday, 04/21/2024	HOMEWORK #1 DUE BY 11:59 PM	
Module 4 Week 4 04/22/2024	• Supervised Learning – Classification Using SVM • Basic Evaluations	Module #3 Discussion is due. Module #2/3 Quiz is due. **HW #2 is assigned.** Module Quiz #4 is assigned.
Sunday 04/28/2024	HOMEWORK #2 DUE BY 11:59 PM	
Module 5 Week 5 04/29/2024	• Supervised Learning – Classification Using Decision Trees (Part I)	Module #4 Quiz is due. **HW #3 is assigned.** Module #5 Quiz is assigned. Module #5 Discussion: Tree 1 is assigned.
Module 6 Week 6 05/06/2024	• Supervised Learning – Classification Using Decision Trees (Part II)	Module #5 Quiz is due. Module #5 Discussion is due. Module #6 Quiz is assigned. Module #6 Discussion: Tree 2 is assigned.
Sunday, 05/12/2024	HOMEWORK #3 DUE BY 11:59 PM	
Module 7 Week 7 05/13/2024	• Supervised Learning – Classification Using KNN • Supervised Learning Methods Comparison	Module #6 Quiz is due. Module #6 Discussion is due. **HW #4 is assigned.** Module #7 Quiz is assigned. Module #7 Discussion: KNN is assigned.
Module 8 Week 8 05/20/2024	• Unsupervised Learning – Hierarchical Clustering • Unsupervised Learning – K-Means Clustering	Module #7 Quiz is due. Module #7 Discussion is due. Module #8 Quiz is assigned. Module #8 Discussion: HAC is assigned.
Sunday, 05/26/2024	HOMEWORK #4 DUE BY 11:59 PM	
Module 9 Week 9 05/27/2024	• Advanced Evaluation **+ Review**	Module #8 Quiz is due. Module #8 Discussion is due. **HW #5 is assigned.** Module #9 Quiz is assigned.
Module 10 Week 10 06/03/2024 **Memorial Day – No Class**	• Ethics in ML (**Watch Video**)	Module #9 Quiz is due. Module #10 Discussion: Ethics is assigned. Module #10 Quiz assigned
Sunday, 06/09/2024	HOMEWORK #5 DUE BY 11:59 PM	
Module 11 Week 11 **06/10/2024**	**Final Exam**	Module #10 Discussion is due. Module #10 Quiz is due.

This syllabus is subject to change as necessary to better meet the needs of the students. Significant changes are unlikely and if a change occurs, it will be thoroughly addressed during class and posted under Announcements in D2L.