

**Course:** DATA 4319 — Statistical and Machine Learning

**Textbook:** Instructor Notes & “Learning From Data” by Y.S. Abu-Mostafa, M. Magdon-Ismail, and H. Lin

**CRN:** 14656

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**Office Hours:** TBA

**Time:** W 5:30pm – 8:15pm

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**Course Description:** This course blends the predictive perspective of statistical pattern recognition and the algorithmic perspective of machine learning. Topics include, but are not limited to: applications of appropriate machine learning algorithms in various disciplines, prediction and performance metrics, data transformations, supervised learning, unsupervised learning, and reinforcement learning. This will be a project based course, and will emphasize the use of the Julia v1.0 programming language.

**Grading Policy:** You will need to purchase a 3-ring binder. This binder will be used to hold and organize your coursework. You will need to make sections (using dividers) for the following (percentage of overall grade shown):

Homework, Class Activities, and Quizzes: 80%

Final Exam: 20%

**General University Policies:** All students are subject to UH-Downtown Academic Honesty Policy and to all other university-wide policies and procedures as they are set forth in the UH-Downtown University Catalog and Student Handbook.

**Statement on Reasonable Accommodations:** UH-Downtown complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, pertaining to the provision of reasonable academic adjustments/auxiliary aids for students with a disability. In accordance with Section 504 and ADA guidelines, UHD strives to provide reasonable academic/auxiliary aids to students who request and require them. If you believe that you have a documented disability requiring academic adjustments/ auxiliary aids, please contact the Office of Disability Services, One Main St., GSB314, Houston, TX 77002. (Office) 713-221-5078 (Website) [www.uhd.edu/disability/](http://www.uhd.edu/disability/) (Email) [disabilityservices@uhd.edu](mailto:disabilityservices@uhd.edu)