JHU Engineering for Professionals Applied and Computational Mathematics Course Outline: Data Mining 625.740

| Module | Dates | Topic |
|-----------|-----------------------|-------------------------------------|
| Module 1 | W 9/02 — T 9/08 | Intro. to Data Mining |
| Module 2 | W = 9/09 - T = 9/15 | Review of Statistics |
| Module 3 | W = 9/16 - T = 9/22 | Bayes Decision Theory* |
| Module 4 | W = 9/23 - T = 9/29 | Linear Regression |
| Module 5 | W $9/30$ — Th $10/01$ | Midterm Exam |
| Break | F 10/02 - S 10/11 | No Class |
| Module 6 | M 10/12 - S 10/18 | Support Vector Machines |
| Module 7 | M 10/19 - S 10/25 | Linear Discrimination |
| Module 8 | M 10/26 - S 11/01 | Multilayer Neural Networks |
| Module 9 | M 11/02 - S 11/08 | Dimensionality Reduction |
| Module 10 | M 11/09 - S 11/15 | Decision Trees and Random Forests** |
| Module 11 | M 11/16 - S 11/22 | Unsupervised Learning |
| Module 12 | M 11/23 - S 11/29 | Student Presentations |
| Module 13 | M 11/30 - S 12/06 | Student Presentations |
| Module 14 | M 12/07 - S 12/13 | Final Exam |

^{*}Project proposals are due on 9/22.

^{**}No homework this week. Project papers and presentation videos and slides are due on 11/17.