## SEMESTER PROJECT

## PRESENTATIONS AND REPORT DUE DECEMBER 15, 11:59 PM. NO EXTENSIONS

- (1) You are required to work on the following competition and develop a learning model for the problem
  - https://www.kaggle.com/c/lish-moa
  - Please register on kaggle and download the files provided in the competition.
- (2) Deliverables
  - (a) The final project report and presentation (only file is required, no in person/video presentation) due December 15, 11:59 pm.
- (3) Final Report (Online Submission) (pdf)
  - (a) Prediction Model and Evaluation. The rationale for choosing a given model should be provided and discussed in detail. What steps were taken in the learning process for the model selection. How was regularization done? What was validation used for? Please provide detailed discussion. Learning Curve, Validation Curves should be provided. Discussion on how the hyperparameters were chosen.
  - (b) Estimate for the out of sample error from the test data.
  - (c) Code used for generating the predictor. Please provide python code.
- (4) Final Presentation (6-10 slides) should summarize these findings. (pdf)