FISH 6005 Project 1

Due March 31, 2019

Marks: 50% of course total.

Develop and estimate a state-space stock assessment model using the catch and survey data provided for Atlantic cod in NAFO Divisions 3Ps. The latest DFO assessment documents are provided for your reference.

Grading scheme:

i. grammar, report structure, clarity and readability/succinctness (10)
ii. description of model assumptions (e.g. self-weighting survey indices or not) and justification of decisions (10)
iii. innovative problem solving (e.g. plus group or not, literature reviews, soliciting expert advice, team work with other students) (10)
iv. investigation of model robustness to key assumptions (10)
v. demonstration of model reliability and performance (e.g. goodness of fit, retrospective patterns) (10)

Provide R and cpp scripts as an appendix.

After the semester a meeting will be organized with DFO scientists to review your project results, with the objective of contributing new ideas, methods, and results to the ongoing stock assessment framework process that DFO is engaged in during 2018-2019. You will be expected to present some of your project research at this review meeting and it is a good opportunity for you to demonstrate you expertise.