Subject: Practice on Advanced Hydrology

Course number：DMP385E
Instructor：Prof. A. W. Jayawardena
Term / Time：Fall through Spring

1 Course Description

The objective of this course is to train the students in various quantitative methods in Hydrology including some exercises on hydrological data analysis, modeling and prediction.

2 Course Outline (Course Topics)

Week

1 ：Exercises on System function estimation
2 ：Exercises on least squares estimation
3 ：Exercises on Impulse and Frequency Response Functions
4 ：Exercises on IUH determination
5 ：Exercises on IUH application
6 ：Exercises on a typical rainfall-runoff model I
7 ：Exercises on a typical rainfall-runoff model II
8 ：Exercises on flood routing
9 ：Exercises on Kalman filtering I
10 ：Exercises on Kalman filtering II
11 ：Exercises on Frequency analysis I
12 ：Exercises on Frequency analysis II
13 ：Exercises on Frequency analysis III
14 ：Exercises on parameter estimation
15 ：Exercises on error analysis

3 Grading

100% in-course assessment

4 Textbooks

4-1 Required

4-2 Others