



Project Title: On-line Homework System for Undergraduate Statistics Courses

Project Summary *(150 words maximum):*

It is proposed to develop an on-line homework system that can be used in undergraduate Statistics courses. The system will be free to the students, unlike existing systems that are linked to textbooks (such as MathXL). The system will allow random selection of problems from sets of problems, customization of problems via randomization algorithms, linkage to statistical software language R (if feasible), automatic grading and instant feedback to the students.

UBC currently supports WebWork via the CTLT. This system seems well-suited to adopt for our use. On-line homeworks would be created for undergraduate Statistics courses, commencing with STAT 200 and STAT 241/251. Modules of questions would be created by the development team, these being encoded into WebWork and linked to course management systems as required. Students would attempt numerous on-line homework sets during the term, obtaining instant feedback. This would replace most or all paper-based assignments, and free teaching assistants from grading to more productive tasks.