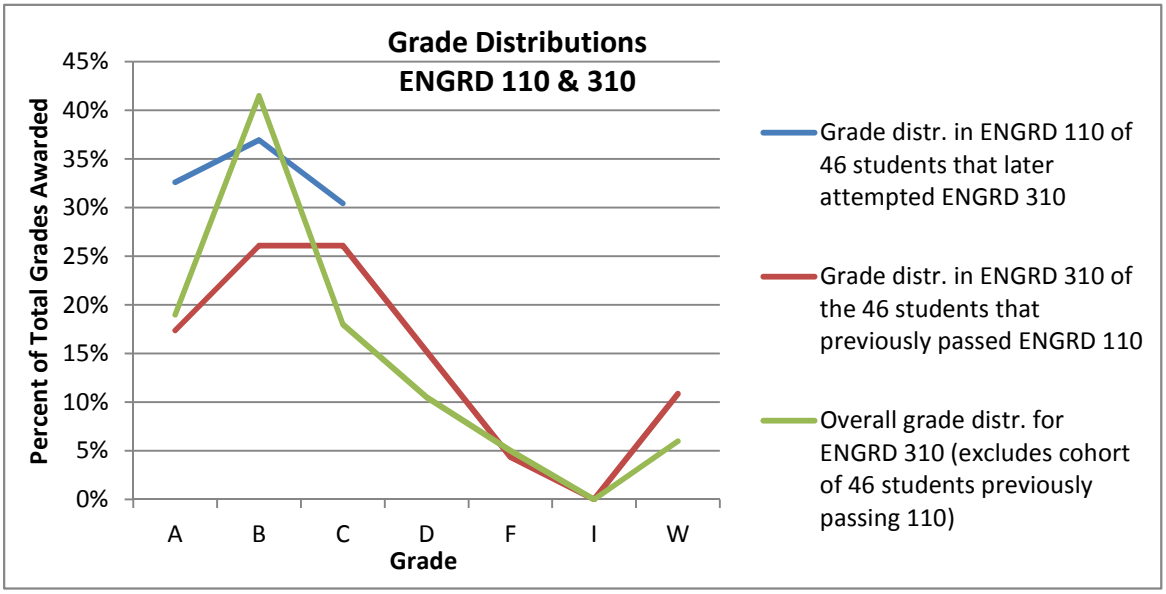
Folsom Lake College 10/17/13 Revision
Performance in ENGRD 310 of Students Having Previously Passed ENGRD 110 at FLC
Support for Departmental SLO Assessment

The following analyses were performed in response to a departmental request for support in assessing the student learning outcomes for ENGRD 110. The intent of the request was to show how well 110 graduates performed in 310. The methodological approach taken here was to select 310 students in a recently ended semester and then select only those that had passed 110 in a preceding semester.

To determine the success rate of those ENGRD 310 students that had previously passed ENGRD 110, ENGRD 310 enrolles from both S12 and S13 were merged resulting in a pool of 257 students, 46 (18%) of which had passed ENGRD 110 at FLC in the four prior semesters (F10, S11, Smr11, & F11 for S12 ENGRD 310 enrollees, and F11, S12, Smr12, & F12 for S13 ENGRD 310 enrollees). The following graph reflects the grade distributions of 1) the cohort of 46 students passing their ENGRD 110 classes, 2) the cohort of 46 students in the 310 classes they took in either S12 or S13, and 3) all ENGRD 310 enrollees in S12 and S13, excluding the cohort of 46 students that passed ENGRD 110 at FLC during the four prior semesters (note that these students may have satisfied the prereq for 310 by having completed 110 at FLC earlier than four semesters prior to their 310 attempt. They may also have satisfied the prereq at another college or via the placement test).




Based on the resulting small sample (N=46), students having previously passed ENGRD 110 were about as likely to receive an 'A' in 310 (17% compared to 19%), much less likely to receive a 'B' in 310 (26% compared to 41%), quite a bit more likely to receive a 'C' in 310 (26% compared to 18%), and were more likely to drop ('W') 310 when compared to all other S12 and S13 ENGRD 310 enrollees (N=[257-46=]211). The computed course success rate in ENGRD 310 of students that previously passed 110 is 69.6%. The computed course success rate in ENGRD 310 of all other S12 and S13 ENGRD 310 students (N=211) is 78.5%. While significance testing was not performed, a differential of nearly nine percentage points may warrant further study.

This group of 46 students' grades in ENGRD 110 were correlated with their grades in ENGRD 310. The resulting correlation coefficient is 0.455 on the Pearson scale where '0' means no correlation whatsoever (the grade in 110 has no relationship to the grade in 310 - that is, an 'A' in 110 is just as likely to result in an 'F' as it is an 'A'), and '1' means a perfect positive correlation (an 'A' in 110 predicts unequivocally an 'A' in 310). 0.455 is a middling positive correlation which suggests that a passing grade in 110 is only fairly likey to result in a passing grade in 310 (note that more than 39% of those passing 110 that went on to attempt 310 received a grade notation of 'D', 'F', or 'W').