

Summary of Core Assessment

7/21/16

Bio 1A: n = 368

1st Generation College Students (n = 102/368, 28%)

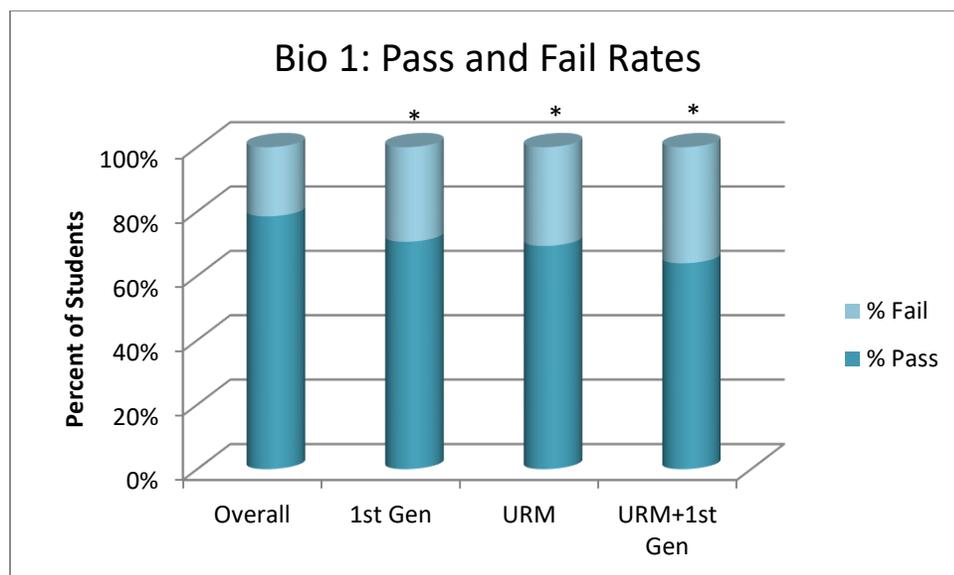
- Scored lower on Test of Scientific Literacy Skills (TOSLS_Total (56% vs. 60%)), but not Biology Concept Inventory (BCI)
- Scored lower in Bio 1A (75% vs. 78%)
- **Were less likely to pass Bio 1A: 71% of 1st Gen students passed while 82% of non-1st Gen students passed**

URM Students (n = 75/365, 21%)

- Did not differ on scores of the TOSLS or BCI (seem to come in just as prepared)
- Scored lower in Bio 1A (74% vs. 78%)
- **Were less likely to pass Bio 1A: 69% of URM students passed while 81% of non-URM students passed**

Students who were both URM and 1st Generation (n = 36/368, 10%)

- Did not differ from other students on TOSLS or BCI
- Scored lower in Bio 1A (73% vs. 77%)
- **Were less likely to pass Bio 1A: 64% of URM+1st Gen students passed while 80% of non-URM+1st Gen students passed**



Bio 1B: n = 184

1st Generation College Students (n = 39/169, 23%--note lower % of class 1st Gen than BIOL 1A)

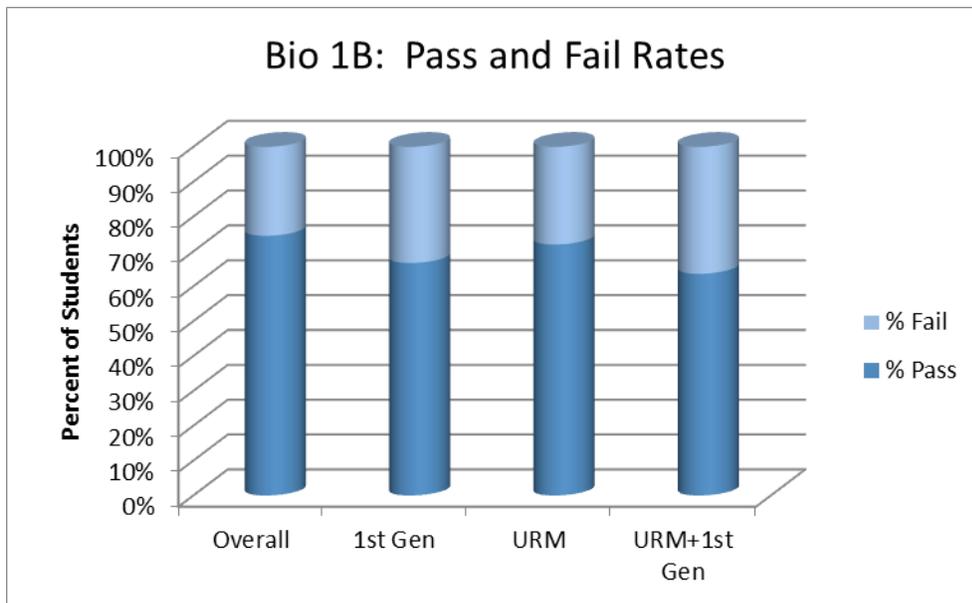
- Did not differ from non-1st Gen students on TOSLS, BCI, or course grade
- Passed Bio 1B at the same rate as non-1st Gen students (67% vs. 79% passed, p = 0.105) Note: pass rates trending lower

URM Students (n = 25/172, 15%, note lower % of class URM than BIOL 1A)

- Did not differ from non-URM students on TOSLS, BCI, or course grade
- Passed Bio 1B at the same rate as non-URM students (72% vs. 78% passed, p = 0.544)

Students who were both URM and 1st Generation (n = 11/184, 6%, note lower % of class 1st Gen and URM than BIOL 1A)

- Scored lower on TOSLS Total (44% vs. 56%)
- Did not differ in Bio 1B scores compared to non-URM+1st Gen students
- Passed Bio 1B at the same rate as non-URM+1st Gen students (64% vs. 75% passed, p = 0.396)



Comparison of Bio 1A and Bio 1B Concept Inventory Performance

- Bio 1A students had higher scores on TOSLS Total—this suggests scientific literacy skills decreasing although significance went away when looked at only Spring BIOL 1B that had a better administration protocol.
- Bio 1B students had higher scores on BCI Total, suggesting improvement on biology content (mainly molecular biology).
- Note that mean scores on both concept inventories were below a passing level for Bio 1A and Bio 1B