Summary of Key Evidence: Spring 2023 [BSCI]/[PSCI] Pilot Assessment Reporting for UCORE UCORE Assessment | Washington State University

Background

Inquiry in the Biological Sciences [BSCI] and Inquiry in the Physical Sciences [PSCI] are two of the Ways of Knowing designators for UCORE, WSU's general education curriculum. [BSCI] and [PSCI] courses advance [BSCI] / [PSCI] designator student learning outcomes associated with six of the WSU Undergraduate Learning Goals (Scientific Literacy, Quantitative Reasoning, Critical Thinking, Information Literacy, Written Communication, and Breadth of Learning) by asking students to ask and answer questions about the biological or physical world in ways that value empirical observation as a key foundation for developing evidence-based theories.

Prior to Fall 2023, students were required to complete one [BSCI] course and one [PSCI] course, where at least one of those courses included a lab. Effective Fall 2023, students entering WSU must complete courses in at least six of the seven Ways of Knowing designators, including at least one [BSCI] or [PSCI] course with a lab; see the UCORE website for more information.

Methods and Responses

[BSCI] and [PSCI] course instructors were asked to complete pilot [BSCI]/[PSCI] Assessment Reports for UCORE for spring 2023, to help UCORE understand how well students (including students who do not complete majors that emphasize scientific inquiry) are achieving the [BSCI]/[PSCI] designator student learning outcomes and associated WSU Undergraduate Learning Goals. The report asked instructors to provide an assessment of student achievement of [BSCI]/[PSCI] designator learning outcomes (and associated WSU Undergraduate Learning Goals).

A total of 45 reports were submitted by 38 instructors, representing **62%** of [BSCI] and [PSCI] classes and **71%** of students enrolled in [BSCI] and [PSCI] courses in spring 2023. In **64%** of reports, instructors indicated that the majority (>50%) of students in their course were non-STEM majors. (Approximately 48% of students enrolled in all [BSCI]/[PSCI] courses in spring 2023 were non-STEM majors, see the appendix for more information.)

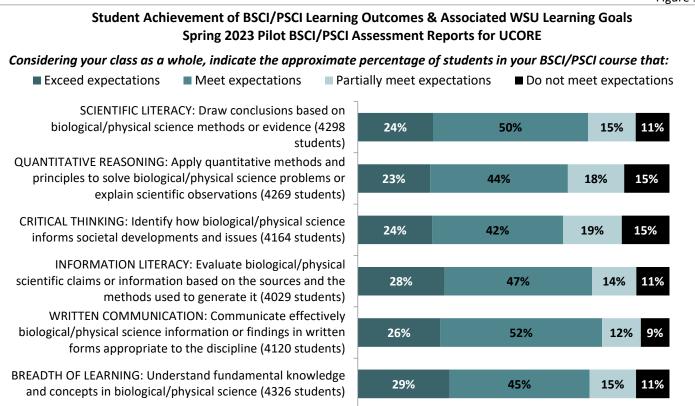
To complement Spring 2023 [BSCI]/[PSCI] Pilot Assessment Reporting for UCORE (direct measure, using faculty expert judgement), [BSCI]/[PSCI] course enrollments and C-/D/F/W rates were also examined (indirect measures, giving information about success and progress through the curriculum) for UCORE assessment (see the <u>Appendix: Supplemental Focus on Student Enrollment and Course Grades in Spring 2023 [BSCI]/[PSCI] Courses</u> for more information).

Achievement of [BSCI]/[PSCI] Designator Learning Outcomes and Associated WSU Learning Goals

Instructors rated students on their performance on each [BSCI]/[PSCI] designator learning outcome (and associated WSU Learning Goal), providing evaluation as appropriate to their course and its assignments.

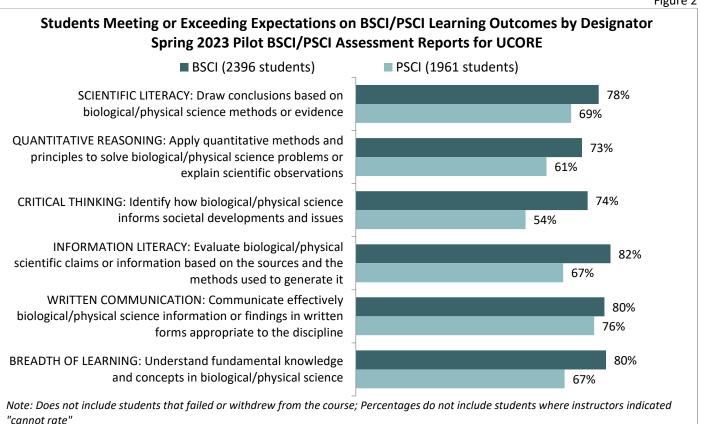
Overall Achievement. Overall, spring 2023 [BSCI]/[PSCI] instructors indicated that **74%** of students met or exceeded expectations on the designator learning outcomes associated with **Scientific Literacy**. Additionally, **67%** of students met or exceeded expectations for **Quantitative Reasoning**, **66%** for **Critical Thinking**, **75%** for **Information Literacy**, **78%** for **Written Communication**, and **74%** for **Breadth of Learning**. See *Figure 1*.

Achievement by Designator. Pilot results indicated that the percentage of students meeting or exceeding expectations on the designator learning outcomes was generally higher (average +12%) in [BSCI] courses. See *Figure 2*.



Note: Does not include students that failed or withdrew from the course; Does not include students where instructors indicated "cannot rate"



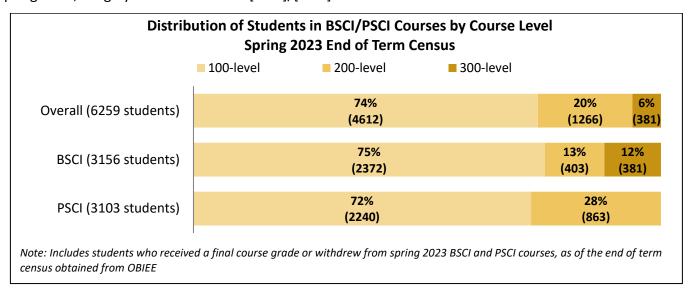


Appendix: Supplemental Focus on Enrollment and Course Grades in Spring 2023 [BSCI]/[PSCI] Courses

To complement Spring 2023 [BSCI]/[PSCI] Pilot Assessment Reporting for UCORE (direct measure, using faculty expert judgement), [BSCI]/[PSCI] course enrollments and C-/D/F/W rates were also examined (indirect measures, giving information about success and progress through the curriculum) for UCORE assessment. [BSCI]/[PSCI] course enrollments and C-/D/F/W rates for all spring 2023 CAPS courses were obtained from OBIEE end of term census data.

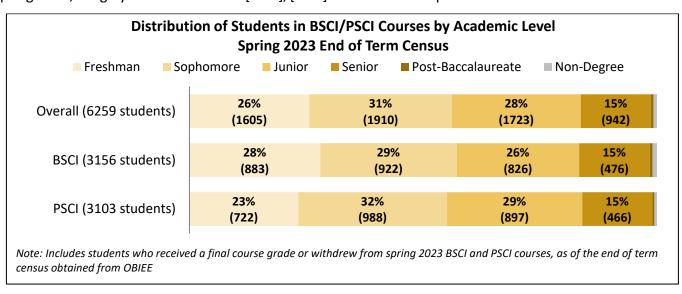
[BSCI]/[PSCI] Course Enrollments: Distribution of Students by Course Level

In spring 2023, roughly 3 in 4 students in [BSCI]/[PSCI] courses were in 100-level courses:



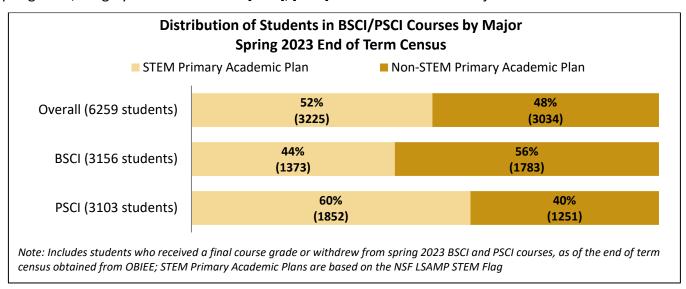
[BSCI]/[PSCI] Course Enrollments: Distribution of Students by Academic Level

In spring 2023, roughly 1 in 3 students in [BSCI]/[PSCI] courses were sophomores:



[BSCI]/[PSCI] Course Enrollments: Distribution of Students by Major

In spring 2023, roughly 1 in 2 students in [BSCI]/[PSCI] courses were STEM majors:



[BSCI]/[PSCI] C-/D/F/W Rates: % C-/D/F/W by Course Level

In spring 2023, roughly 1 in 6 students in [BSCI]/[PSCI] courses received a C-/D/F/W course grade.

C-/D/F/W Rates in [BSCI]/[PSCI] Courses by Course Level Spring 2023 End of Term Census (6259 students)	
Course Level	% C-/D/F/W
100-level	17% (779/4612)
200-level	18% (234/1266)
300-level	12% (47/381)
Overall	17% (1060/6259)

Note: Includes undergraduate students who received a final course grade or withdrew from Spring 2023 [BSCI]/[PSCI] courses, as of the end of term census obtained from OBIEE

