

## Summary of Key Evidence: AY 2023-24 [BSCI]/[PSCI] 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.

Students that entered WSU prior to Fall 2023 are required to complete one [BSCI] course and one [PSCI] course, where at least one of those courses includes 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 [BSCI]/[PSCI] Assessment Reports for UCORE for fall 2023 and spring 2024, 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, as well as provide evidence of UCORE's contribution towards advancing the WSU Undergraduate Learning Goals. The report asked instructors to provide an assessment of student achievement of [BSCI]/[PSCI] designator learning outcomes in their course.

A total of 102 reports were submitted by 58 instructors, representing **67%** of [BSCI] and [PSCI] classes and **75%** of students completing [BSCI] and [PSCI] courses in fall 2023 and spring 2024. In **47%** of reports, instructors indicated that the majority (>50%) of students in their course were non-STEM majors (39% of reports for BSCI and 55% for PSCI).

*To complement AY 2023-24 [BSCI]/[PSCI] 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 [Appendix: Supplemental Focus on Student Enrollment and Course Grades in AY 2023-24 \[BSCI\]/\[PSCI\] Courses](#) for more information).*

### **Achievement of [BSCI]/[PSCI] Designator Learning Outcomes**

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

**Overall Achievement.** Overall, AY23-24 [BSCI]/[PSCI] instructors indicated that **72%** of students met or exceeded expectations on the designator learning outcomes associated with **Scientific Literacy**. Additionally, **66%** of students met or exceeded expectations for **Quantitative Reasoning**, **69%** for **Critical Thinking**, **67%** for **Information Literacy**, **69%** for **Written Communication**, and **71%** for **Breadth of Learning**. See *Figure 1*.

**Achievement by Designator.** Of the 102 reports submitted in AY23-24, 49 were from [BSCI] courses and 53 were from [PSCI] courses. Results indicated that the percentage of students meeting or exceeding expectations on the designator learning outcomes was generally higher in [BSCI] courses. See *Figure 2*.

Figure 1

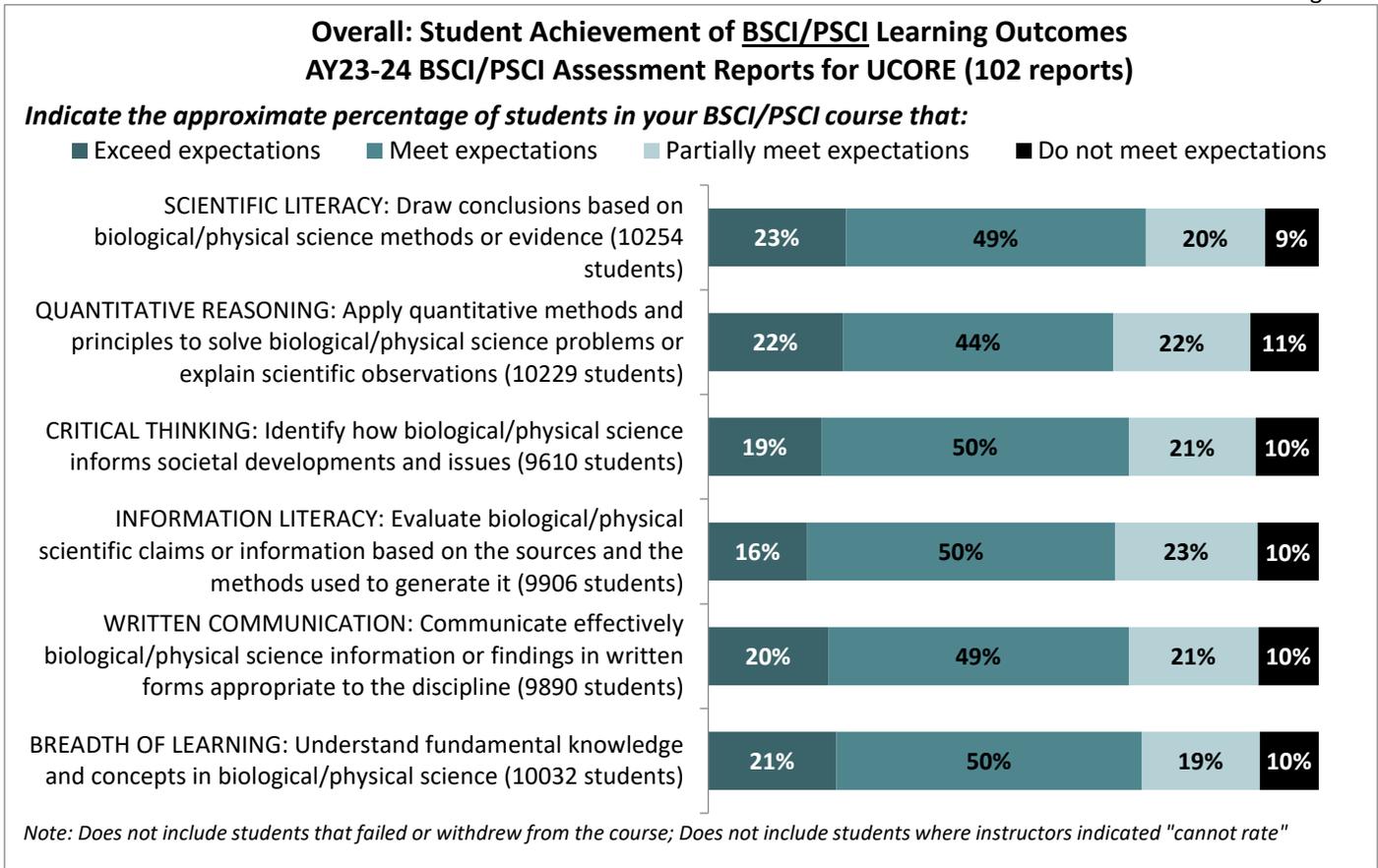
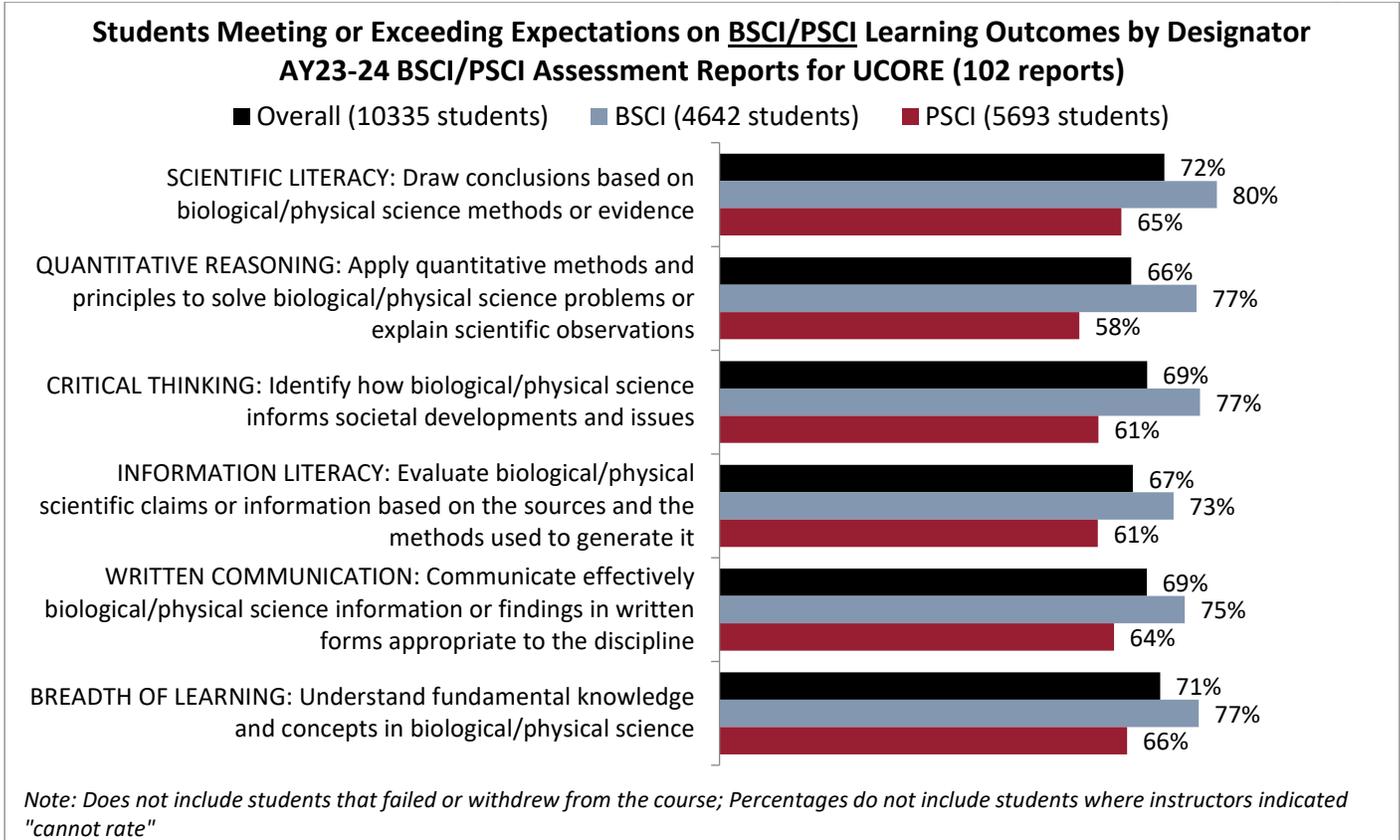


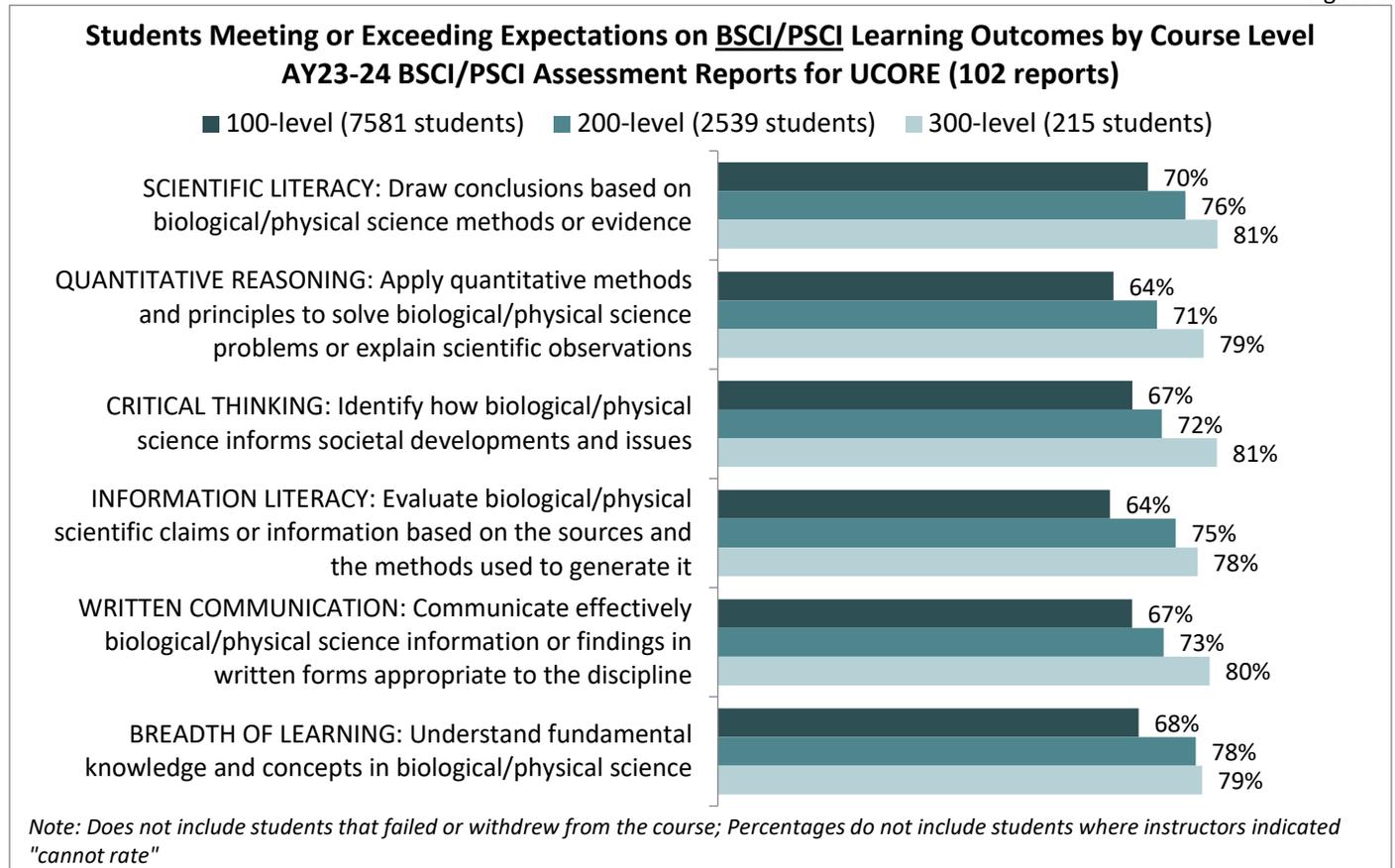
Figure 2



**Achievement by Course Level.** Of the 102 reports submitted in AY23-24, 61 were from 100-level courses, 36 from 200-level courses, and 5 from 300-level courses. Of the 49 [BSCI] reports submitted, 61% were for 100-level classes, 29% were for 200-level classes, and 10% were for 300-level classes. Of the 53 [PSCI] reports, 58% were for 100-level classes and 42% were for 200-level classes.

Results indicated that the percentage of students meeting or exceeding expectations on the designator learning outcomes was generally higher in 200-level and 300-level courses. See *Figure 3*.

Figure 3



## **Appendix: Supplemental Focus on Enrollment and Course Grades in AY 2023-24 [BSCI]/[PSCI] Courses**

To complement [BSCI]/[PSCI] 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 fall 2023 and spring 2024 [BSCI] and [PSCI] courses were obtained from OBIEE end of term census data.

*Note: The majority of undergraduate courses that had pivoted to distance delivery for AY 2020-21 as a result of the COVID-19 pandemic returned to in-person instruction starting in AY 2021-22. Additionally, many COVID-19 related restrictions began to be lifted in spring 2022.*

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

<b>Distribution of Students in BSCI/PSCI Courses by Course Level Fall 2023 &amp; Spring 2024 End of Term Census</b>			
<b>Course Level</b>	<b>BSCI % (#) of students</b>	<b>PSCI % (#) of students</b>	<b>BSCI/PSCI Overall % (#) of students</b>
100-level	<b>82%</b> (5428)	<b>69%</b> (5076)	<b>76%</b> (10504)
200-level	<b>14%</b> (924)	<b>30%</b> (2217)	<b>23%</b> (3141)
300-level	<b>4%</b> (254)	<b>0%</b> (13)	<b>2%</b> (267)

*Note: Includes undergraduate students who received a final course grade or withdrew from Fall 2023 and Spring 2024 BSCI/PSCI courses, as of the end of term census obtained from OBIEE*

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

<b>C-/D/F/W Rates in BSCI/PSCI Courses by Course Level Fall 2023 &amp; Spring 2024 End of Term Census</b>			
<b>Course Level</b>	<b>BSCI % C-/D/F/W</b>	<b>PSCI % C-/D/F/W</b>	<b>BSCI/PSCI Overall % C-/D/F/W</b>
100-level	<b>18%</b> (957/5428)	<b>20%</b> (1037/5076)	<b>19%</b> (1994/10504)
200-level	<b>18%</b> (167/924)	<b>17%</b> (379/2217)	<b>17%</b> (546/3141)
300-level	<b>18%</b> (46/254)	<b>23%</b> (3/13)	<b>18%</b> (49/267)
Overall	<b>18%</b> (1170/6606)	<b>19%</b> (1419/7306)	<b>19%</b> (2589/13912)

*Note: Includes undergraduate students who received a final course grade or withdrew from Fall 2023 and Spring 2024 BSCI/PSCI courses, as of the end of term census obtained from OBIEE*

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

**BSCI Enrollment by Course Level & Academic Level**

<b>Distribution of Students in <u>BSCI</u> Courses by Course Level &amp; Academic Level Fall 2023 &amp; Spring 2024 End of Term Census</b>				
<b>Start Term Academic Level</b>	<b>% (#) of students</b>			
	<b>100-level (5428 students)</b>	<b>200-level (924 students)</b>	<b>300-level (254 students)</b>	<b>Overall (6606 students)</b>
First-year Student	<b>40%</b> (2172)	<b>27%</b> (254)	<b>1%</b> (3)	<b>37%</b> (2429)
Sophomore	<b>28%</b> (1534)	<b>26%</b> (244)	<b>18%</b> (45)	<b>28%</b> (1823)
Junior	<b>20%</b> (1077)	<b>26%</b> (243)	<b>31%</b> (79)	<b>21%</b> (1399)
Senior	<b>10%</b> (533)	<b>19%</b> (172)	<b>49%</b> (124)	<b>13%</b> (849)
Post-Baccalaureate	<b>0%</b> (27)	<b>1%</b> (6)	<b>1%</b> (2)	<b>1%</b> (35)
Non-Degree	<b>1%</b> (65)	<b>1%</b> (5)	<b>0%</b> (1)	<b>1%</b> (71)

*Note: Includes undergraduate students who received a final course grade or withdrew from Fall 2023 and Spring 2024 BSCI courses, as of the end of term census obtained from OBIEE*

**PSCI Enrollment by Course Level & Academic Level**

<b>Distribution of Students in <u>PSCI</u> Courses by Course Level &amp; Academic Level Fall 2023 &amp; Spring 2024 End of Term Census</b>				
<b>Start Term Academic Level</b>	<b>% (#) of students</b>			
	<b>100-level (5076 students)</b>	<b>200-level (2217 students)</b>	<b>300-level (13 students)</b>	<b>Overall (7306 students)</b>
First-year Student	<b>32%</b> (1610)	<b>17%</b> (381)	.	<b>27%</b> (1991)
Sophomore	<b>29%</b> (1491)	<b>37%</b> (813)	<b>8%</b> (1)	<b>32%</b> (2305)
Junior	<b>24%</b> (1231)	<b>31%</b> (681)	<b>8%</b> (1)	<b>26%</b> (1913)
Senior	<b>13%</b> (683)	<b>14%</b> (320)	<b>85%</b> (11)	<b>14%</b> (1014)
Post-Baccalaureate	<b>1%</b> (29)	<b>0%</b> (11)	.	<b>1%</b> (40)
Non-Degree	<b>1%</b> (32)	<b>0%</b> (11)	.	<b>1%</b> (43)

*Note: Includes undergraduate students who received a final course grade or withdrew from Fall 2023 and Spring 2024 PSCI courses, as of the end of term census obtained from OBIEE*