



**General Education Program Assessment
Gen Ed Designation: Natural Scientific Inquiry (NSI)
Institutional Report
Fall 2020-Winter 2021**

Purpose and Process

To ensure that students are obtaining the intended outcomes of the General Education program, the General Education Oversight Committee (GEOC) has established an assessment plan for the program. Each year, instructors teaching courses in a subset of Gen Ed designations are responsible for choosing at least one assignment from their course, scoring it using the relevant Gen Ed rubric(s) for the course's designation(s), and submitting those scores to the GEOC. The designations scheduled for assessment in 2020-2021 were Civic Literacy (CIV), Natural Scientific Inquiry (NSI), and Wayne Experience (WE). Once scores are submitted, the Office of Institutional Research and Analysis analyzes and disseminates the results according to GEOC guidelines.

Note that accreditation of the university depends in part on our ability to demonstrate student learning for the Gen Ed learning outcomes.

This report presents aggregated data from all Natural Scientific Inquiry (NSI) courses offered from Fall 2020-Winter 2021 in two formats: table and graph.

How GEOC can use this information

GEOC can use assessment data to understand how well the Gen Ed program is helping students gain the knowledge and skills the program intends to provide. Based on that understanding, GEOC might choose a variety of actions, such as celebrating successes, strategizing ways to better support instructors, improving the program's design, or arguing for resources to enhance the program. Colleges/schools, departments/programs, and instructors are also encouraged to use the assessment results to strengthen the Gen Ed program.

Resources for training and assessment for the Gen Ed program are available on the GEOC website at <https://provost.wayne.edu/gen-ed-assessment>.

Please see the appendix for information about participation rates and percent of students assessed by course.

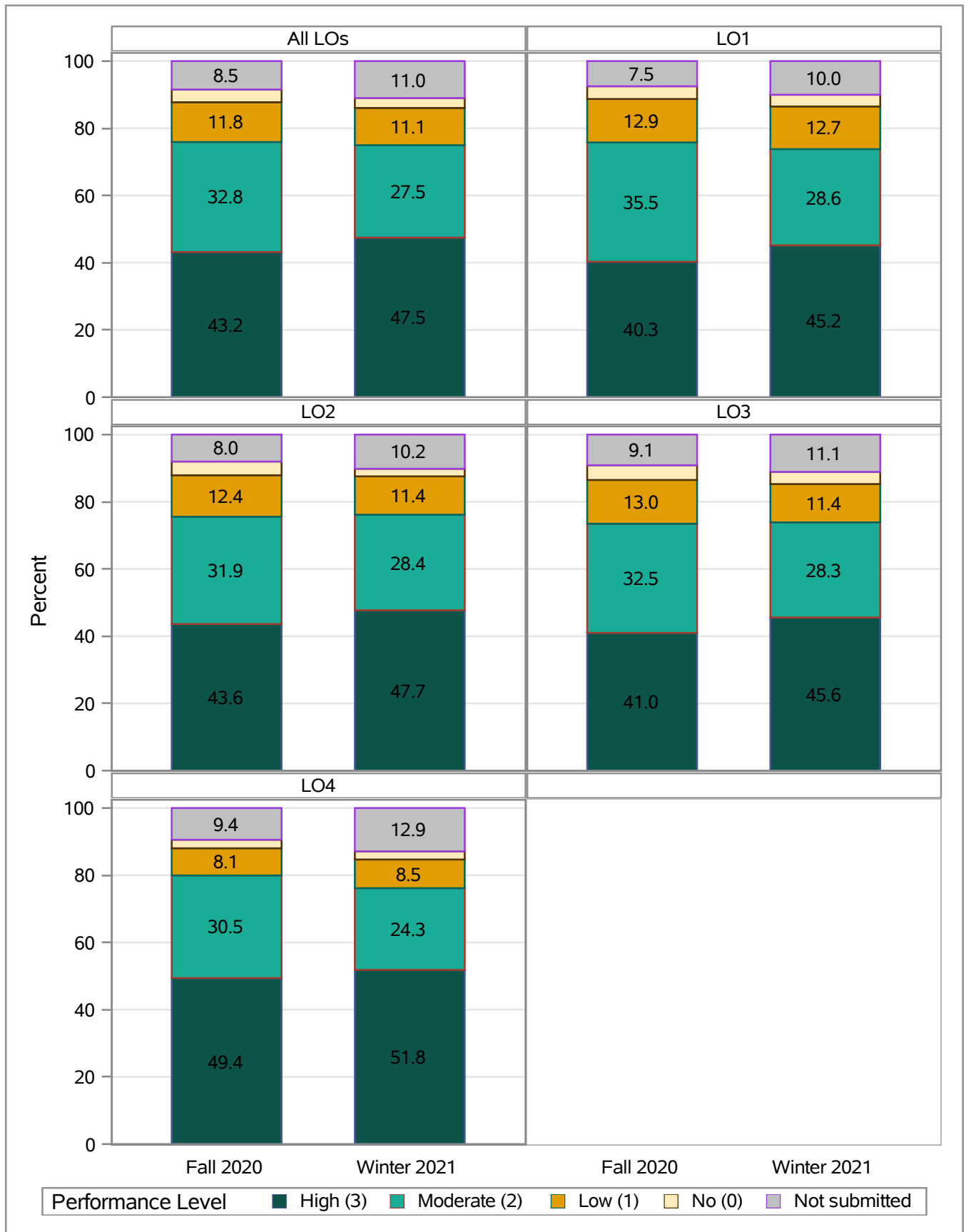
Please note that the count of participating sections counts some lectures and labs as separately depending on how they are listed in Banner. As such, in some courses with labs the count of non-participating sections may be skewed if only the lecture or the lab (but not both) submitted Gen Ed assessment data.

Table 1 provides a summary of assessment results for each learning outcome by performance level for Fall and Winter combined. The table includes the number of scores (N) submitted, the average score (mean [Mn]), standard deviation of scores from the mean (SD) and the percentage of students achieving each performance level for each learning outcome individually and a grand total for all learning outcomes together.

Table 1. Natural Scientific Inquiry Results

Learning Outcome Area				Percent of Responses by Performance Level				
				High (3)	Moderate (2)	Low (1)	No (0)	Not submitted
	N	Mn	SD	%	%	%	%	%
LO1: Explain natural phenomena using contemporary scientific concepts, theories, and/or principles	6,934	2.0	1.2	42.4	32.6	12.8	3.7	8.6
LO2: Describe the process of scientific inquiry	6,919	2.0	1.2	45.4	30.5	12.0	3.3	8.9
LO3: Analyze historical or contemporary societal subjects using scientific concepts and principles	6,872	1.9	1.3	42.9	30.7	12.3	4.1	9.9
LO4: Apply the scientific method to evaluate data	5,551	2.0	1.3	50.5	27.6	8.3	2.5	11.0
All	26,276	2.0	1.2	45.0	30.5	11.5	3.4	9.5

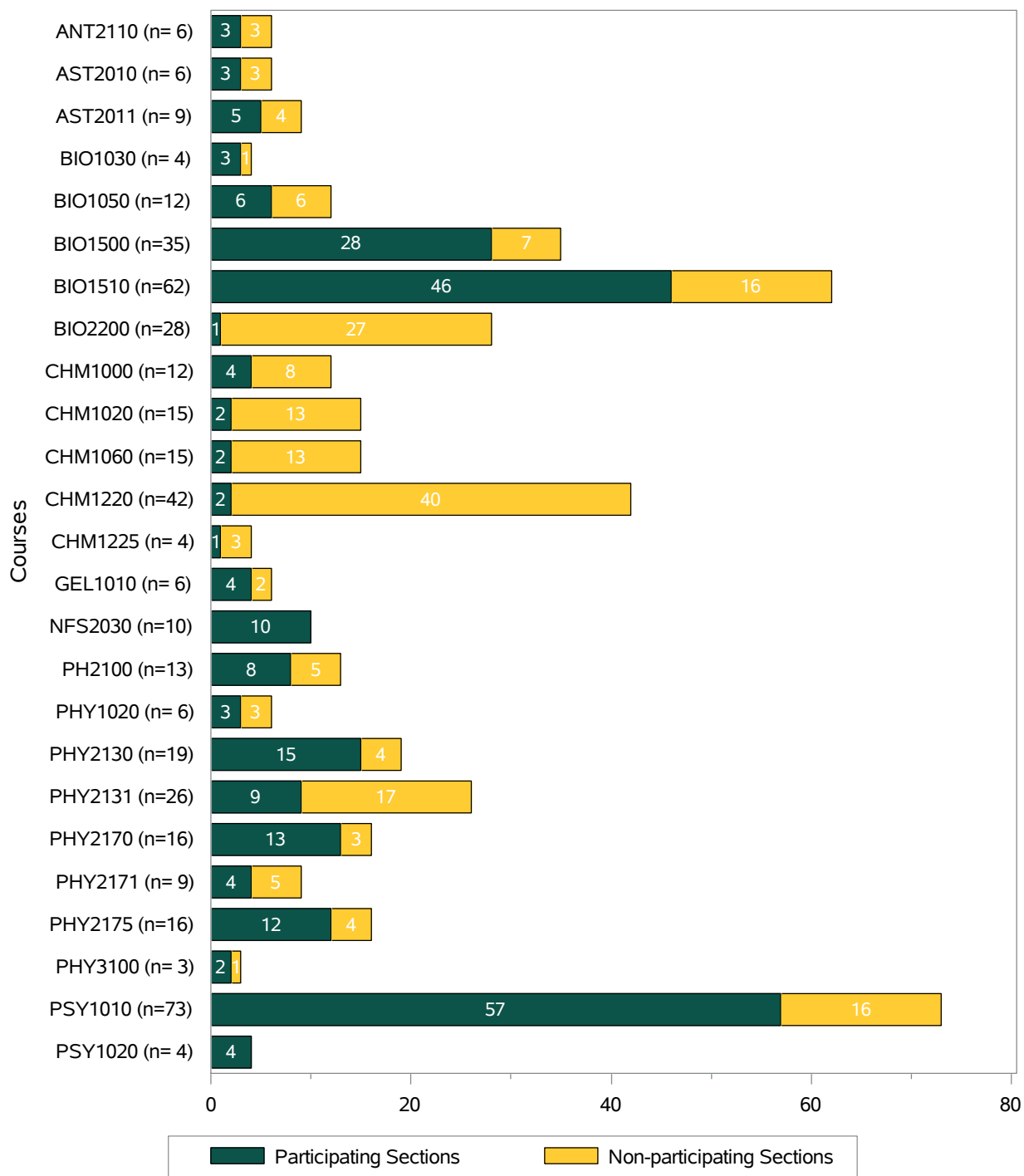
The data in Table 1 are disaggregated and presented below as bar graphs. The first bar for each learning outcome presents Fall data; the second bar presents Winter data.



List of courses included in Fall 2020-Winter 2021 for Natural Scientific Inquiry

College	Department	Course	Active Section#	Assesed Sections Enrollment	Assessed Sections#	Assessed#	Assessed%
LS	ANT	ANT2110	6	210	3	202	96%
LS	BIO	BIO1030	4	102	3	59	58%
LS	BIO	BIO1050	12	404	6	383	95%
LS	BIO	BIO1500	35	607	28	547	90%
LS	BIO	BIO1510	62	1063	46	978	92%
LS	BIO	BIO2200	28	22	1	2	9%
LS	CHM	CHM1000	12	172	4	167	97%
LS	CHM	CHM1020	15	273	2	264	97%
LS	CHM	CHM1060	15	128	2	122	95%
LS	CHM	CHM1220	42	252	2	241	96%
LS	CHM	CHM1225	4	81	1	83	102%
LS	GEL	GEL1010	6	224	4	221	99%
LS	NFS	NFS2030	10	1364	10	498	37%
LS	P H	PH2100	13	476	8	415	87%
LS	PHYS	AST2010	6	180	3	178	99%
LS	PHYS	AST2011	9	67	5	59	88%
LS	PHYS	PHY1020	6	66	3	64	97%
LS	PHYS	PHY2130	19	376	15	365	97%
LS	PHYS	PHY2131	26	172	9	136	79%
LS	PHYS	PHY2170	16	69	13	57	83%
LS	PHYS	PHY2171	9	89	4	85	96%
LS	PHYS	PHY2175	16	252	12	246	98%
LS	PHYS	PHY3100	3	46	2	46	100%
LS	PSY	PSY1010	73	1412	57	1392	99%
LS	PSY	PSY1020	4	384	4	379	99%

Count of NSI Sections That Submitted Gen Ed Assessment Data in Fall 2020-Winter 2021



% of Students Assessed in Participating NSI Sections

