ILLINOIS INSTITUTE OF TECHNOLOGY

Transforming Lives.Inventing the Future. www.iit.edu

Fall 2022 Core Curriculum ITP (Intro to the Profession) Assessment Report

This report should be a collaborative effort involving the Designation-level Assessment Coordinator, the evaluators, and the Designation Subcommittee.	Core Curriculum Designation: Introduction to the Profession (ITP)
	Responsible Party: Core Curriculum Assessment Committee (CCAC); ITP subcommittee of the CCAC: Mary Jorgenson Sullivan, Associate Teaching Professor; Kathryn Spink Associate Teaching Professor; Fred Weening, Associate Teaching Professor; Georgia Papavasiliou, Professor, Associate Dean

1. CORE CURRICULUM LEARNING OBJECTIVES EVALUATED: List the Core Curriculum learning objectives that were evaluated in this assessment cycle.

Applicable Core Curriculum Learning Goals

Collaborate professionally and ethically, able to

- Identify and discuss ethical issues.

Communicate effectively, able to

- Speak and write appropriately within and across disciplines and cultures.

Introduction to the Profession (ITP) Learning Outcomes

1. ***Ethics:*** *Students will demonstrate an understanding of the ethical framework applicable to the discipline. Students will be able to understand the importance of ethics to the profession. Students will be able to recognize ethical issues and propose ethical responses to ethical problems.*
2. ***Communication:*** *Students will be able to understand the standards of professional communication used within the profession. Students will be able to communicate (understand, and respond) in a discipline-specific fashion*
3. ***Professionalism:*** *Students will be able to understand the norms of professional behavior within the discipline. Students will be able to discuss and understand how professional conduct reflects on and supports the discipline.*

2. ASSESSMENT METHODOLOGY: Use the table below to describe your assessment methodology. Do not simply reference the assessment plan for this program. *Copy the table for each learning goal assessed in the last academic year.*

First Learning Objective	
Learning Objective Assessed	All learning outcomes were assessed with the same methodology.

Semester(s) in which artifacts were collected	Fall 2022
Name of rubric used to evaluate student artifacts (*attach copy of rubric to this report*)	Students were assessed on a 3 point scale, with values corresponding to achievement levels below: • 0=does not meet expectations, • 1=meet expectations, • 2= proficient. The threshold for meeting expectations was developed by interactions between the CCAC contact person and the course instructor, based upon their professional judgment as educators. To guide this the equivalent of 2.0/4. scale, (i.e. a C grade), was promulgated as useful guide to "meets expectations", as students are required to maintain a 2.0 overall GPA for graduation requirements. The guide to "proficient"was promulgated as is the equivalent of. an "A" grade. As each instructor will have different scaling in accordance with their own disciplinary expertise and expectations, the committee collaborated with course instructors in determinations how these standards were implemented in artifact evaluation. Rubrics to assess the learning objectives within the assessed artifacts were developed by a collaborative interaction between the CCAC and the course instructor. In many cases the original rubric for the assignment was aligned with the achievement levels, using the assessment achievement levels indicated above. Students who withdrew or had medical or other approved exemptions for the artifact were included in a separate category as not assessed (NA). Students who remained registered but did not submit the assessed artifact were assigned scores of 0 and thus "does not meet expectations", since it was judged that failure to submit required work does not meet the expectations of an IIT graduate. For those courses in which the instructor did not submit artifacts, or for which the artifact did not measure the learning objectives with an acceptable degree of validity, students were categorized as non-compliant. For these students, the committees felt they could not assess student learning through no fault of the student, but due to some system or process fault. Thus, all students were included in one of these five categories: 1. proficient 2. meets expectations 3. does not meet expectations 4. not assessed 5. non-compliant

Artifact source	Course(s) and Instructor(s): All ITP courses offered during Fall 2022 taken to satisfy the ITP requirement. ARCH 100 Jacobs/Langdon BIOL 100 Menhart BME 100 Dhar BUS 100 Haddadian CHE 100 Chmielewski CAE110 Stephens CS 100 Bauer ECE 100 Zhou FDSN 100 Diel ITM 100 Trygstad MATH 100 Ellis MMAE 100 Ruiz PHYS 100 Littlejohn LCHS 100 Moller ITP classes not assessed, since they were not offered this semester: CHEM100	Assignment(s): Artifacts assessed varied for each class, but generally included exam questions, papers, other individual assignments or other assessment given to measure achievement toward each learning outcome Artifacts assessed were completed by students in response to assessment given near or at the end of the semester.
Sample Size	445	
Semester of Assessment/Evaluation	Fall 2022	
Names & Titles of the Evaluators	Mary Jorgenson Sullivan, Kathryn Spink, Georgia Papavisiliou, Fred Weening	

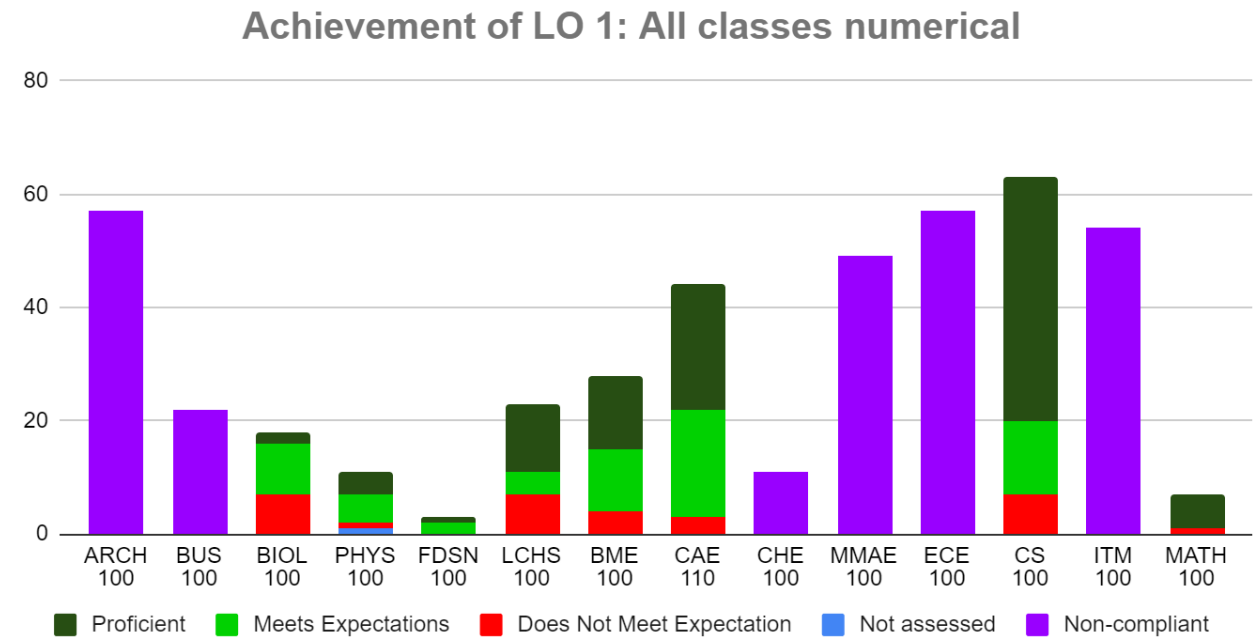
3. ASSESSMENT RESULTS: Insert a table or graph summarizing the results. Results should be presented by a performance indicator for each learning goal. If the data were collected in Blackboard Outcomes, the IIT Assessment Office will provide the information to insert into this section of the report (see samples below).

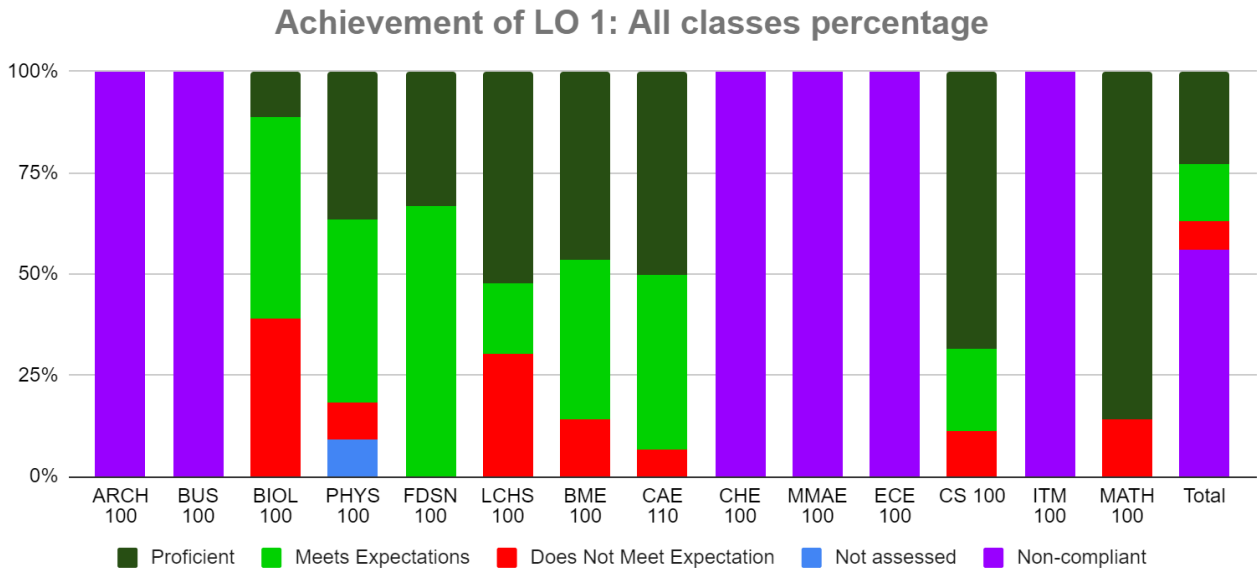
See data charts in the discussion section

4. DISCUSSION OF RESULTS: Use this section to describe the key findings and program performance issues revealed in the interpretation of the data. *The evaluators should provide input into this section of the report.*

LO1

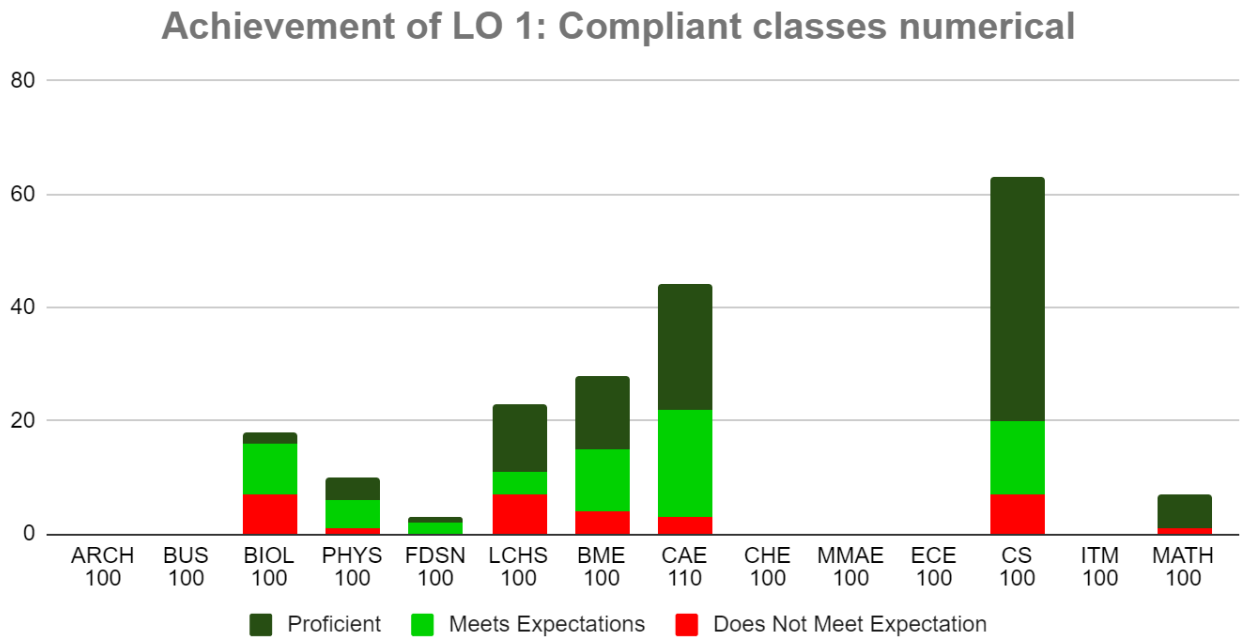
Ethics: *Students will demonstrate an understanding of the ethical framework applicable to the discipline. Students will be able to understand the importance of ethics to the profession. Students will be able to recognize ethical issues and propose ethical responses to ethical problems.*

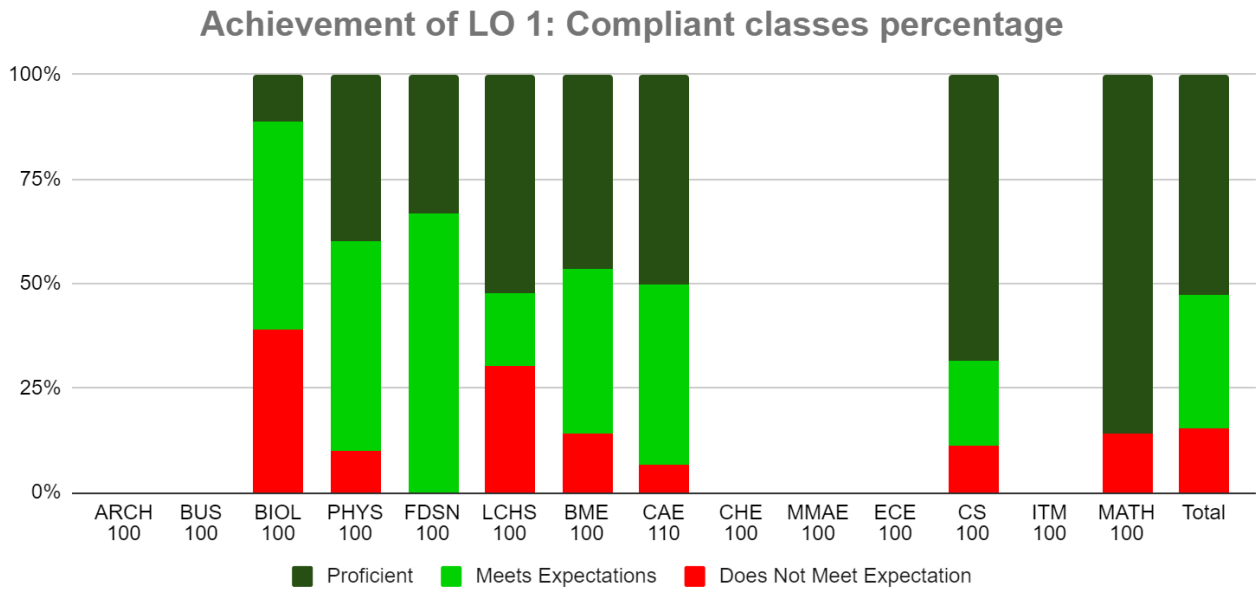




Overall, compliance for this learning objective was poor; 43% of courses were non-compliant, accounting for 56% of the students in ITP courses. For three classes, no artifacts were submitted (ITM, ECE, and CHE). For three classes, the artifacts submitted did not assess the first learning outcome in a systematic and valid way (BUS, ARCH, and MMAE). For BUS and ARCH, non-compliance was specific to this LO only; this suggests that refinement of the LO will result in greater participation.

Due to the percentage of instructors who did not submit artifacts or for which the artifacts did not validly measure the learning objectives, we calculated the levels of achievement for classes in which the learning objectively was measured. Here the overall sample size was 196.





For classes that were compliant, 15% of students did not meet the expectation. 32% met the expectation, and 53% demonstrated proficiency in the learning objective.

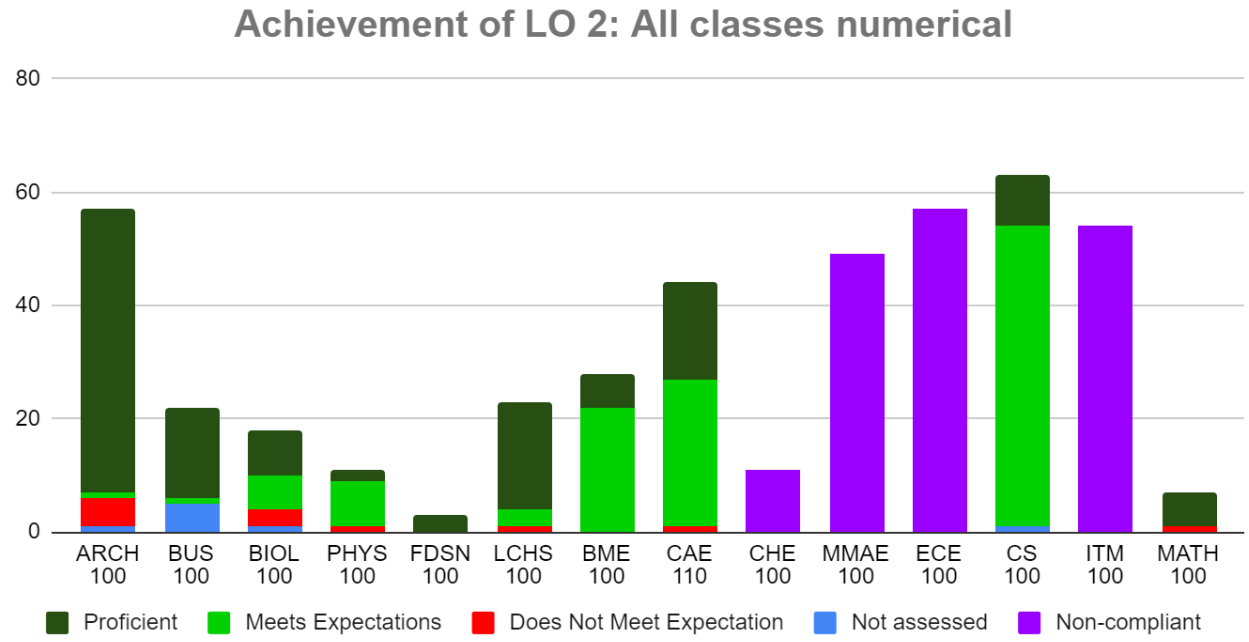
Assessment of the first learning outcome in compliant classes indicated significant heterogeneity. This can be attributed to several possible factors:

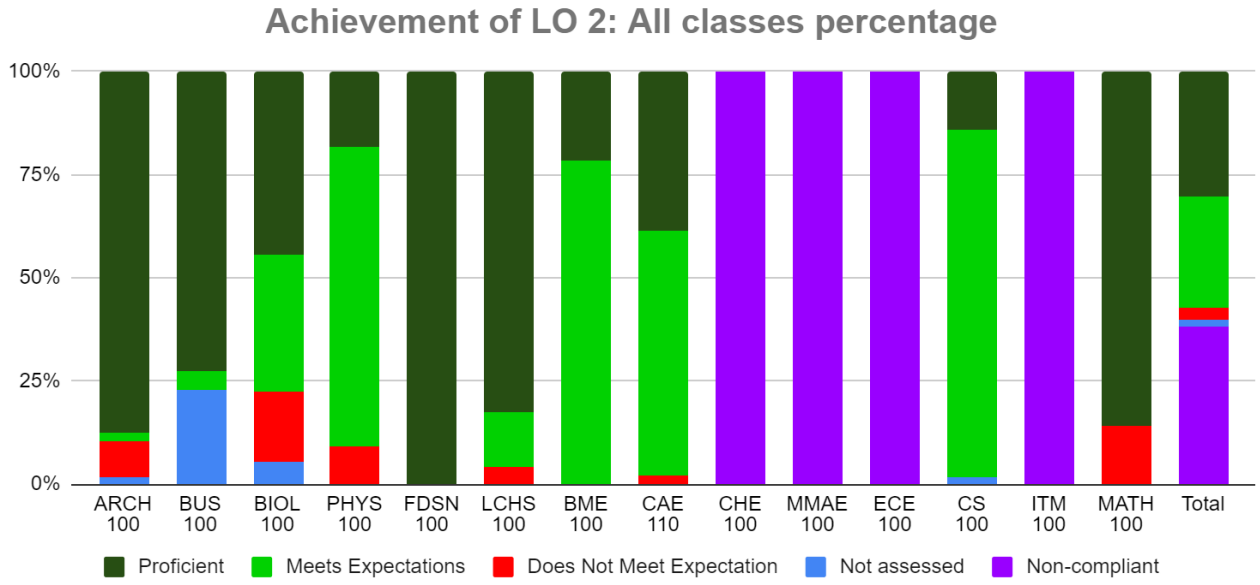
- Familiarity with and understanding of the learning objectives; some instructors possessed varying levels of experience in teaching the ITP courses and participating in the core curriculum assessment process.
- Heterogeneity in artifact type.
- Different levels of student achievement or different standard sets for each course. There was noticeable variance in the assessment of student artifacts for LO 1.
- Varying levels of faculty expectation. This indicates the need for discussion of whether students in different majors should be expected to achieve the LO at different levels, or whether a university-wide standard should be required.
    - A number of programs at Illinois Tech expand on ethical training for students later in the curriculum (including engineering and architecture).
    - Faculty should determine whether a standard level of introductory ethics is to be taught and assessed in ITP, with discipline-specific ethical training in programs across the university, and what would be required to do so.

The committee recommends further collaboration and support to ensure standardization of artifacts, rubrics, and consistency in grading.

LO 2

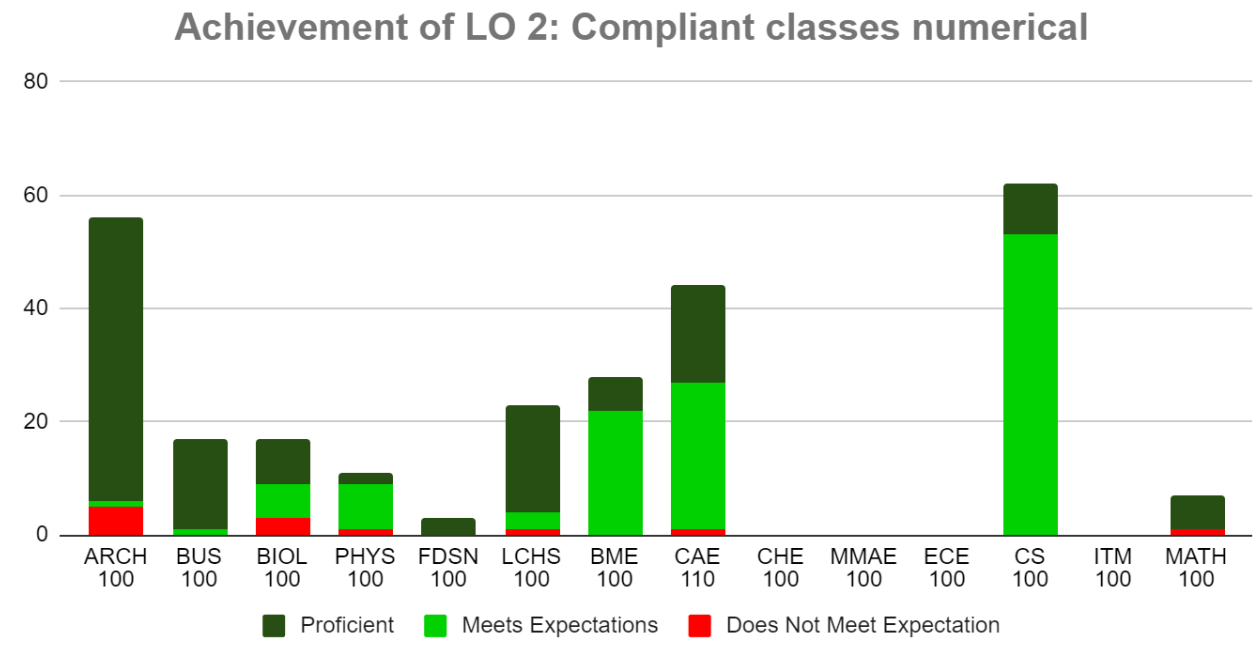
Communication: *Students will be able to understand the standards of professional communication used within the profession. Students will be able to communicate (understand, and respond) in a discipline-specific fashion.*

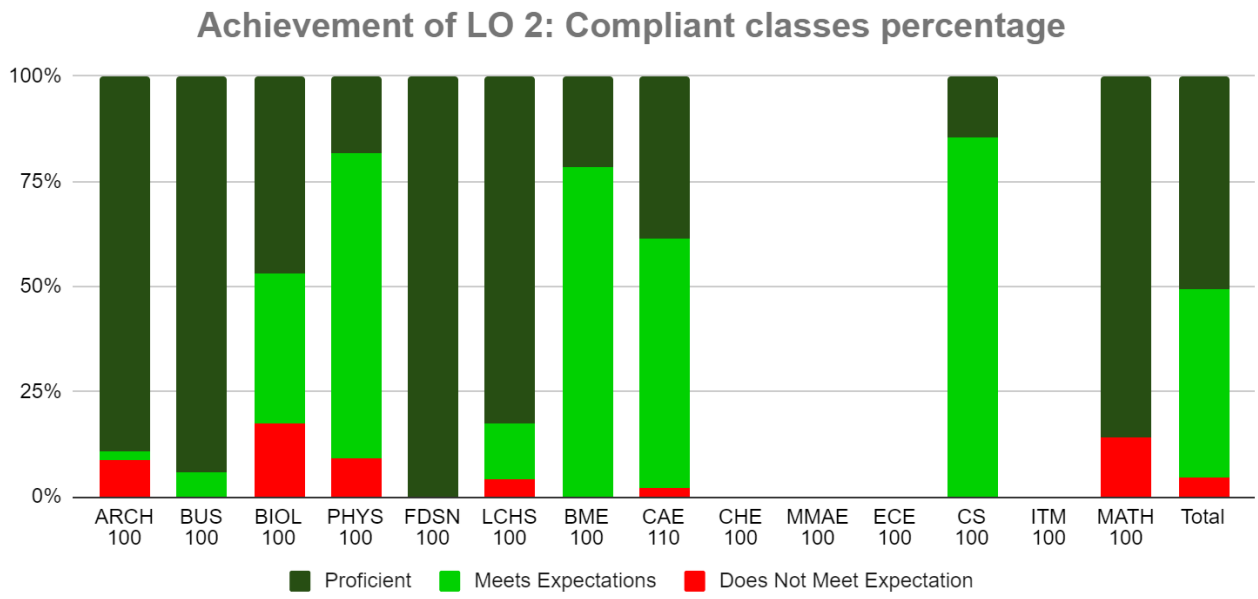




Participation in assessment of the second learning objective was slightly improved; however, 28% of classes were non-compliant, resulting in 36% of students not being assessed for the LO. For three classes, no artifacts were submitted (ITM, ECE, and CHE). For one course (MMAE), the artifacts submitted did not validly measure achievement of the LO.

Due to the percentage of instructors who did not submit artifacts, we calculated the levels of achievement for classes in which the learning objective was measured. Here the overall sample size was 268.



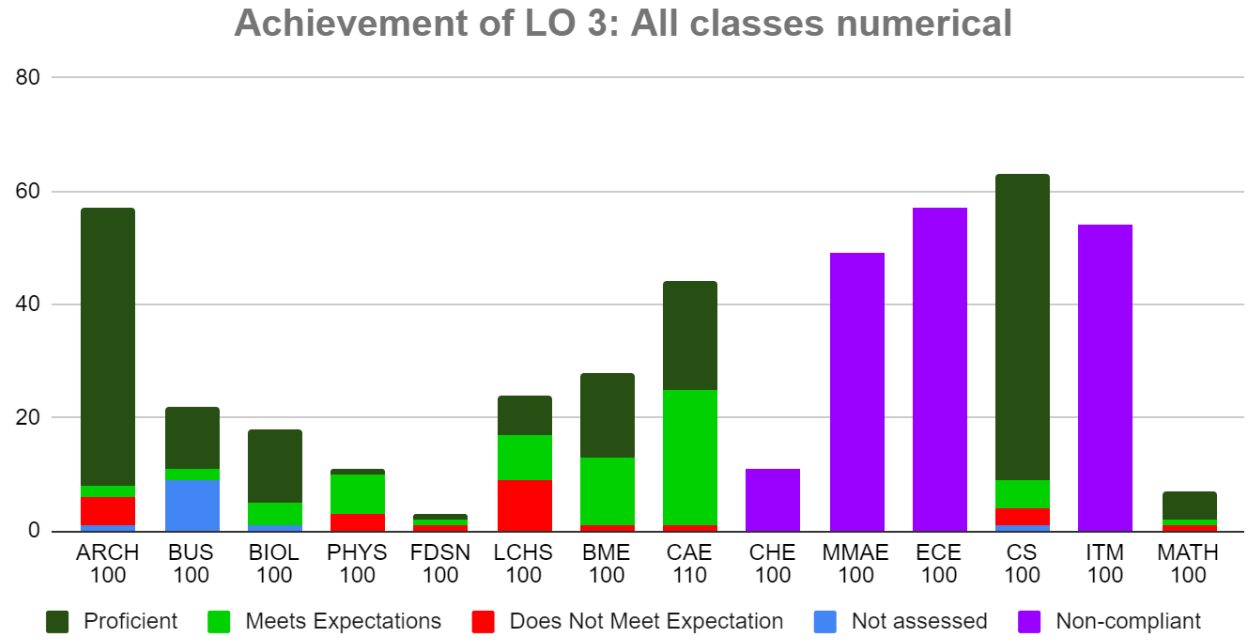


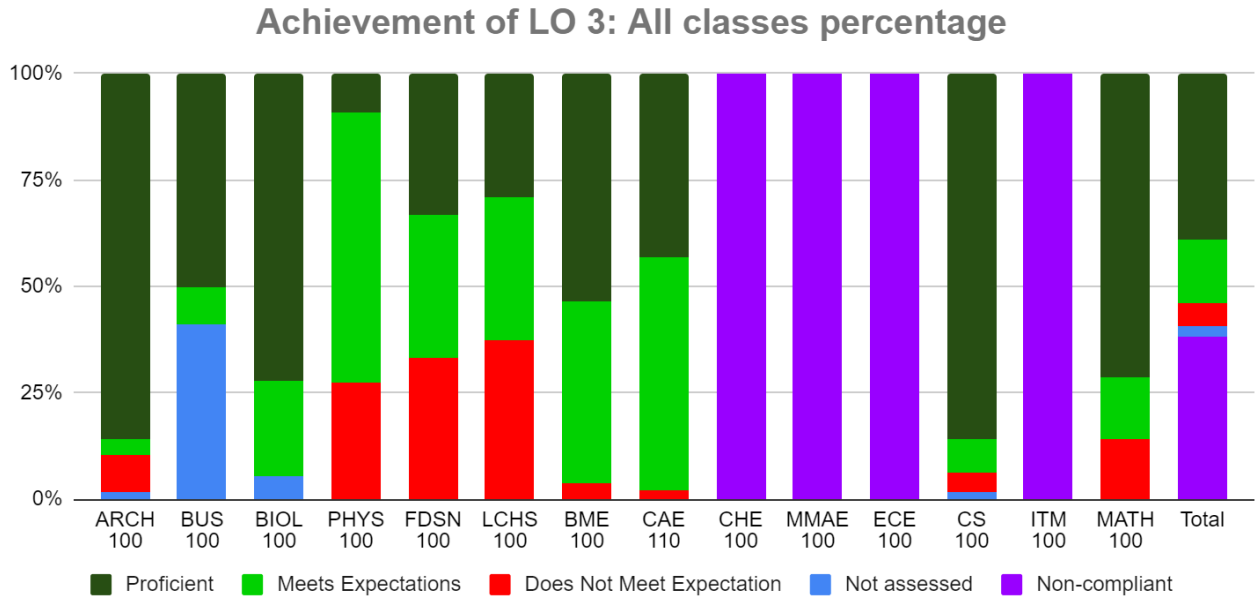
Of the students assessed, 4% did not meet the learning outcome. 45% and 51% met or demonstrated proficiency in the LO, respectively. This seems to indicate that undergraduates in the ITP courses are, by and large, able to achieve this learning outcome. Less heterogeneity was observed among courses for the does not meet category, yet we observed significant heterogeneity for the proficient category. This underscores the need for the committee to provide support, and facilitate collaboration and standardization of artifacts,

rubrics, and expectations.

LO 3

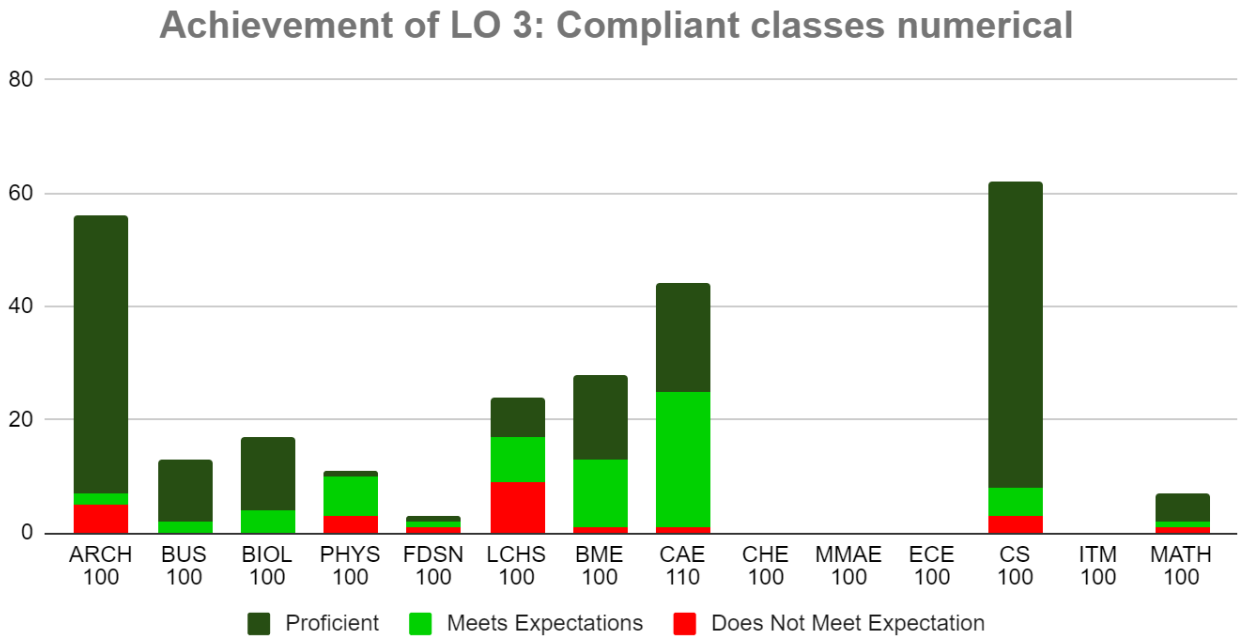
Professionalism: *Students will be able to understand the norms of professional behavior within the discipline. Students will be able to discuss and understand how professional conduct reflects on and supports the discipline.*

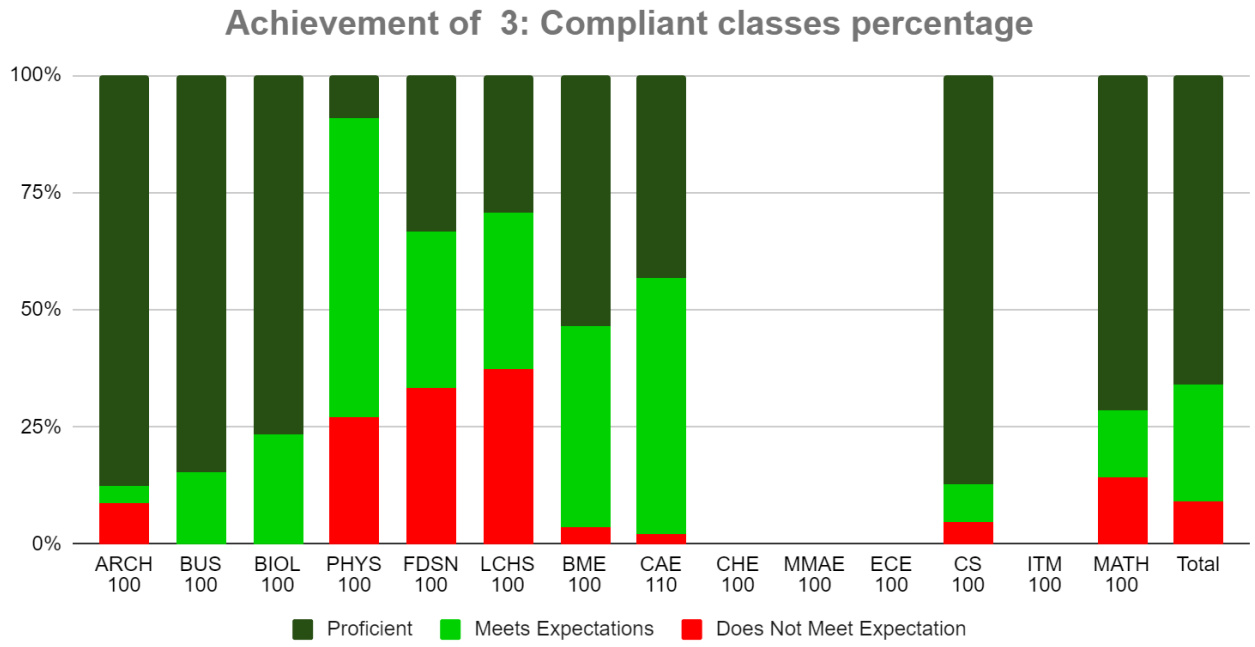




Participation in assessment of the third learning objective was also slightly improved; however, 28% of classes were non-compliant, resulting in 36% of students not being assessed for the LO. For three classes, no artifacts were submitted (ITM, ECE, and CHE). For one course (MMAE), the artifacts submitted did not validly measure achievement of the LO.

Due to the percentage of instructors who did not submit artifacts, we calculated the levels of achievement for classes in which the learning objective was measured. Accounting for students who were not assessed due to withdrawal or medical exemption, and who did not submit the artifact, the overall sample size was 265.





Again, we discovered significant heterogeneity in the data for the third learning objective. This was especially noted in ITP courses in the sciences, which showed higher numbers of students who did not meet the objective. Overall, 9% of students assessed did not meet the learning objective, 25% met the objective, and 66% demonstrated proficiency. This suggests that the majority of students in the ITP courses are able to achieve the learning objective.

However, the heterogeneity in the results points to a need for greater support, collaboration, and standardization of artifacts, rubrics, and grading. The committee observed wide variation in the expectation of the level to which students were held for both meeting expectations, and being proficient; ranging from simply submitting an answer, to a more rigorous assessment of its correctness. As an IIT core requirement, it might be desirable to have a more uniform expectation of the degree to which students need to achieve these LOs.

Many classes are also exceedingly small resulting in large potential errors. This includes a class of only 3 students. Especially where a core component is being delivered, the university is urged to consider a more uniform and efficient way of delivering these classes.

5. IMPROVEMENT PLANS: Use this section to provide specific information about what elements of the curriculum may need to be modified in order to improve the program's performance. *This section should be completed and signed by the UGAA Chair.*

Specific modification	Entities responsible for implementing the changes.	Date by which changes will be in place.	Intended result
This is the first core component assessed that is implemented across all units. Other core components recently assessed (CS, N, S) have natural homes in a limited set of disciplines / AUs and so are more uniform. In ITP, as a core curriculum component we have by definition a common core LO set, but very widely differing implementation that is hampering both student achievements and assessment thereof. Our recommendation is to consider the value of more collaboration as a faculty in delivering the core curriculum in a more consistent fashion 1. More coordination and collaboration on how the common core LOs are delivered and assessed with ITP classes, especially with regard to the level of student achievement expected, and how the LOs are interpreted within the individual disciplines. Faculty should determine what university-wide	UFC, , UGSC, in collaboration with CCAC, and for the ethics LO, the Center for Study of Ethics in the Professions and for the communications LO, the Director of Communication across the Curriculum.	F26	A consistent set of expectations for these ITP LOs. A common set of resources to support faculty in applying these LOs, especially ethics and professionalism. These resources should be adaptable to and supportive of these specific disciplines.

standard levels are desirable.			
In some cases ITP instructors were unaware of specific core LOs and did not have material to deliver or assess them. This impacted compliance. 2. We recommend an effort to more fully engage ITP instructors, and AUs and faculty in general about the core curriculum, especially components such as ITP that span many AUs.	CCAC, UGSC, AU Chairs	F26	More awareness of ITP LOs and ITP classes with more focused material and assessment targeting these LOs. Enhanced compliance in the next ITP assessment cycle, targeting 100% compliance.

Designation Subcommittee Chair should sign below:

Designation Subcommittee Chair Name Signature Date

6. ASSESSMENT PROCESS RECOMMENDATIONS: Use this section to provide feedback on the assessment process itself.

See Improvement plan recommendation #2. We are suggesting the following recommendations for improving the assessment process:

1. As compliance has been an issue for assessment of the ITP courses, we recommend communicating with the deans and chairs to:
    a. communicate the necessity of and value in the process. Combined with the instructor reach-out, this will provide layered support for the process and increase compliance.
    b. provide support from deans and chairs to enhance the delivery of content related to learning objectives.
2. Due to the issues with noncompliance, we recommend repeating the ITP assessment as soon as recommendations can be implemented.
3. The core curriculum assessment committee has conducted instructor reach outs prior to the beginning of the semester and after the first few weeks of the semester. Participation in reach outs enabled instructors to understand the assessment process, timeline, and

expectations. Reach outs are scheduled in accordance with faculty schedules and are recorded for access if faculty are unable to attend. We recommend providing the following guidance during the reach-out session:
    a. an example rubric from a previous assessment that accurately measures the LO
    b. a clear guideline on what qualifies as an artifact (individual, completed student work that demonstrates achievement of the specific LO)
    c. guidelines on how to assess students who have withdrawn, not completed the assignment, or who have exemptions due to extenuating circumstances.
4. Early identification of artifacts by faculty and verification of concordance with the learning objectives by subcommittee members. In several ITP courses, the learning objectives were aligned to assessments after the fact. This resulted in somewhat inconsistent achievement of the learning outcome.
5. The ITP designation consists of courses from different colleges in the university. As such, there is varying knowledge of the core curriculum, the learning objectives, and the relationship between institutional and specialized accreditation. Engineering faculty, for example, perform regular assessment as part of ABET (Accreditation Board for Engineering and Technology) accreditation, which resulted in "assessment fatigue". As part of a separate Illinois Tech assessment initiative, we are developing a communication plan which will position core curriculum assessment within the larger context of HLC accreditation, in relation to the specialized accreditation of individual departments.
6. Some variance occurred as a result of instructor knowledge of the core curriculum, which varied from adjunct to full time faculty. We recommend that adjunct faculty be identified and provided with support in completing the assessment.

6. UGSC REVIEW: The Chair of the UGSC should use this space to comment on each of the proposed curriculum changes.

List of specific modifications to courses or the curriculum.	UGSC Response

7. REPORT SUBMISSION: Please submit this report to NAME ***by DATE***. For questions about the completion of this report, email: EMAIL.

Name of person submitting report	Date submitted