Georgia Institute of Technology

Office of Academic Effectiveness

General Education

Learning Outcome Assessment

Humanities, Fine Arts, & Ethics Outcome

(Spring 2022)

Contents

Executive Summary

The General Education curriculum provides foundational knowledge in academic disciplines, exposing students to diverse learning perspectives and ways of knowing in Mathematics, Science, Social Sciences, and Arts and Humanities (University System of Georgia). Georgia Institute of Technology (Georgia Tech) General Education (Gen Ed) has six learning outcomes: (1) Communication, (2) Quantitative, (3) Computing, (4) Humanities, Fine Arts, and Ethics (5), Natural Sciences, Math, and Technology, and (6) Social Sciences. They are assessed in accordance with our established timeline. Nurtured by the Subcommittee on Gen Ed and Policy, the 3-Year Georgia Tech Gen Ed Assessment Plan (2021-2024) sets the framework for good practice in course delivery and assessment, capitalizing on the good judgment of faculty members regarding students' levels of attainment of Gen Ed learning outcomes. Faculty develop signature assignments in their Gen Ed courses, and the assignments, along with student performance, are collected for review and analysis at the end of each semester. To better understand our students' performance, the Office of Academic Effectiveness (OAE) then partnered with faculty to develop a scale for scoring. The general scale is structured to assess each Gen Ed learning outcome on a continuum: 1-Developing, 2-Meets Expectations, 3-Exceeds Expectations.

This report summarizes the evidence of student learning (n = 843) and provides descriptive statistics for the **Humanities, Fine Arts, & Ethics** outcome to support conversations regarding Gen Ed learning and opportunities for improvement.

Highlights

- **93.6%** (n= 789) of students met or exceeded the Humanities, Fine Arts, & Ethics Outcome expectations, which means students demonstrated developing or better proficiency in describing relationships among languages, philosophies, cultures, literature, ethics, or the arts. Students' performance in the Humanities, Fine Arts, & Ethics outcome met or exceeded Georgia Tech's acceptable target (80%).

- Comparing student demographics for the Humanities, Fine Arts, & Ethics Outcome Outcome, the results indicated that all demographic groups met or exceeded the target of 80%.

Background

An integral part of the delivery of General Education (Gen Ed) at the Georgia Institute of Technology (Georgia Tech) includes the assessment of the learning outcomes. The learning outcomes were approved by the Georgia Tech Undergraduate Curriculum Committee and Faculty Senate, and then by the University System of Georgia's (USG) Council on General Education in April 2011:

> **Communication (Core Area A1)**
> **Outcome**: Student will demonstrate proficiency in the process of articulating and organizing rhetorical arguments in written, oral, visual, and nonverbal modes, using concrete support and conventional language.

> **Quantitative (Core Area A2)**
> **Outcome:** Student will demonstrate the ability to apply basic elements of differential and integral calculus to solve relevant problems.

> **Computing (Institutional Options B)**
> **Outcome:** Student will be able to develop algorithms and implement them using an appropriate computer language and will understand algorithmic complexity and reasonable versus unreasonable algorithms.

> **Humanities, Fine Arts, and Ethics (Core Area C)**
> **Outcome:** Student will be able to describe relationships among languages, philosophies, cultures, literature, ethics, or the arts.

> **Natural Sciences, Math, and Technology (Core Area D)**
> **Outcome:** Student will be able to demonstrate the ability to obtain, analyze, interpret, and criticize qualitative observations and quantitative measurements to explain natural phenomena and to test hypotheses.

> **Social Sciences (Core Area E)**
> **Outcome:** Student will demonstrate the ability to describe the social, political, and economic forces that influence social behavior.

The purpose of this report is to provide assessment results to support conversations regarding General Education learning and opportunities for improvement.

Methods

Georgia Tech conducted an intensive review of the Gen Ed learning outcomes and how students demonstrate their learning in these areas by engaging faculty in Gen Ed assessment conversations in the following steps: (1) Study course enrollment and identify representative courses. We examined enrollment patterns for students taking courses in Gen Ed for the last five years. Patterns were determined, too, by class size (large class-100 or more students; medium class- 50-99 students; small class- 20-49 students). This exercise led to the value that all class sizes would be included in the 3-year Gen Ed Assessment Plan, as well as coverage of each discipline that contributes to Gen Ed. A total of 39 courses represented from different colleges were selected (See Appendix A and B). (2) Identify or develop signature assignments that align with the outcome. Faculty identified measures

that are tangible, visible, self-explanatory, and provide compelling evidence of exactly what students have learned. (3) Develop performance scale. Faculty met and developed a scale for scoring. The general scale is structured to assess each Gen Ed learning outcome: 1-Developing, 2-Meets Expectations, 3- Exceeds Expectations. The following image indicates our goal for this step.
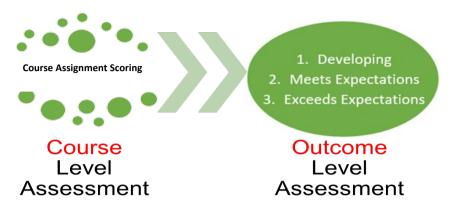

Figure 1 Scoring Method from Course Level Assessment to Outcome Level Assessment

This three-step process has become the basic collaboration framework across courses and units for meaningful Gen Ed assessment.

Sample

The following table indicates the representative nature of the sample by comparing the student demographic information of the sample and the undergraduate student population of the Institute.

Table 1 Sample Size by Student Demographics

Student Demographic	Sample N (%)	Institutional Population N(%)
Gender	(Total = 843)	(Total = 17,447)
Male	544 (64.4%)	10,504 (60.2%)
Female	299 (35.6%)	6,943 (39.8%)
Race/Ethnicity		
White	380 (51.0%)	7,065 (40.5%)
Black or African or American	51 (6.8%)	1,271 (7.3%)
Asian	214 (28.7%)	4,894 (28.1%)
Hispanic or Latino	58 (7.8%)	1,338 (7.7%)
Two or More Races	34 (4.6%)	751 (4.3%)
Unknown	8 (1.1%)	260 (0.1%)
First Generation College Student		
Continuing Generation	668 (89.7%)	13,662 (87.6%)
First Generation	77 (10.3%)	1,932 (12.4%)
Citizenship		
Domestic Student	745 (88.1%)	15,594 (89.4%)
International Student	101 (11.9%)	1,853 (10.6%)
Transfer Student Status		
Non-Transfer Student	723 (85.5%)	16,652 (95.4%)

Transfer Student	123 (14.5%)	795 (4.6%)

The Humanities, Fine Arts, & Ethics Outcome Statement and Representative Courses

ARCH 2111, ID 2202, ID 2241, LMC 2100, LMC 3226, PHIL 3109, PHIL 4176, ML 2500, and FREN 1002 are listed under General Education Core Area C Humanities, Fine Arts, & Ethics, which is associated with the following outcome:

Student will be able to describe relationships among languages, philosophies, cultures, literature, ethics, or the arts.

Measures and Targets for the Humanities, Fine Arts, & Ethics Outcome

In ARCH 2111, students will be asked to respond two questions:

1. Question 1 will assess the evolution of architectural drawing conventions as an essential graphic language that transcended isolated areas and eras. Students will be asked to explain how the introduction of paper shaped architectural production and enhances our understanding of architectural history. Students' answers should be approximately one paragraph with a clear thesis statement and at least three specific examples from different geographic regions (artifacts, projects/sites, and/or architects and how paper transformed their work and/or legacy).
2. Question 2 will assess the translation of structural and performative concepts in architecture. Students will be asked to examine two specific structural features or assemblies then explain how they are directly representative of cross-cultural contact, assimilation, and/or adaptation.

In ID 2202 and ID 2241, students will be able to demonstrate an understanding of the influences of literature on the design arts by correctly identifying multiple answers on an exam question:

1. Exam question for ID 2202: From a set of answers, identify the correct cross-influences from the Transcendentalist literature of the late/early 20th century (Emerson, Thoreau) on the design field known as The Arts & Crafts Movement (Morris, Stickley) in terms of selection and use of (ecological) materials, function of the design (within Survivalist agendas) and design narratives ("spiritual truth").
2. Exam question for ID 2241: From a set of answers, identify the cross-influences from the philosophy of Neoplatonism (Ficino and the Medici School) on the art practiced by Michelangelo in terms of his choices in subject matter for his art projects ("the Great Chain of Being" and "Perfect Forms") and his compositional devices (hierarchies in spatial positioning, perspective systems, use of self-portraits).

In LMC 2100 and LMC 3226, students will be asked to produce a piece of writing that demonstrates a description of the relationships among languages, philosophies, cultures, literature, ethics, or the arts.

In PHIL 3109, students will be asked to write a short assignment summarizing and providing a critical reaction to a concrete case study from the field of engineering ethics. Through this writing, they will identify an ethical dilemma and describe the relationships that are in potential conflict. Faculty will score this writing to determine the quality of student learning.

In PHIL 4176, students will be asked to write a Consideration, an assignment in which they describe the ethical implications of an option for responding to a problem situation, drawing from several distinct ethical frameworks. The course uses a specification grading scheme whereby assignments are graded satisfactory/unsatisfactory, with time-limited opportunities to revise. The assessment will compare number of students who complete the first considerations satisfactorily on their first attempt with the number who complete the additional considerations to reach the satisfactory level.

In ML 2500 Think Globally, students will describe two aspects of one of the cultures discussed in class: a) one that demonstrates a common or important literary theme/idea from that culture that is also found in literature from the students' native culture, and thus shouldn't cause problems when discussing with a native speaker of that culture; and b) one that demonstrates a common or important literary theme/idea that is quite different or absent from those themes found in students' native culture, and which might cause problems when discussing literature with a native speaker of that culture within their culture.

In FREN 1002, students will describe two aspects of French culture discussed in class: a) one that demonstrates a similarity of French culture with the students' native culture, and thus shouldn't cause problems when interacting with a native French speaker; and b) one that demonstrates an important cultural difference or contrast that students need to keep in mind when interacting with a native French speaker within their culture.

Scoring and Data Analysis

For the Humanities, Fine Arts, & Ethics outcome, students were asked to respond to exams, questions, or write a report. This Humanities, Fine Arts, & Ethics Outcome report presents the student performance data from 9 classes from Fall 2021 and Spring 2022. The following table indicates the sample size and the scoring methods.

Table 2 Humanities, Fine Arts, & Ethics Scoring

Course Scoring	Signature Assignment	Scoring Method	N[1]
ARCH 2111	2 questions	0-10	108
ID 2202	1 question	0-10	191
ID 2241	1 question	8/10	195
LMC 2100	Writing	A/B	31
LMC 3226	Writing	0-100	33
PHIL 3109	Writing	1-10	163
PHIL 4176	Pre-Post Writing	0/1	27
ML 2500	Writing	0-3	10
FREN 1002	Writing	1-3	85
Total			843

The following table presents student performance by Questions. Faculty determined a common evaluation scale for the Humanities, Fine Arts, & Ethics outcome achievement. The

following table presents the score interpretation proposed for understanding students' performance at outcome level assessment:

Table 3 Score Interpretation

Score Interpretation			
Course	Developing	Meets Expectations	Exceeds Expectations
ARCH 2111	<5.5	5.5-7.75	>8
ID 2202	<8	8	10
ID 2241	<8	8	10
LMC 2100	<B	B	A
LMC 3226	80-84	85-90	>90
PHIL 3109	5-7.5	8-9	9.5-10
PHIL 4176	No improvement	Improved at post-writing	Achieved at pre-writing
ML 2500	<2.5	2.5	N/A
FREN 1002	<2.5	2.5	N/A

Findings

Based on faculty agreement on the score interpretation, the frequency and percentage of achievement were calculated. Overall, **93.6%** (n = 789) of students met or exceeded the Humanities, Fine Arts, & Ethics Outcome expectations, which means students demonstrated their abilities to describe relationships among languages, philosophies, cultures, literature, ethics, or the arts.

Table 4 Humanities, Fine Arts, & Ethics Outcome Overall Performance

Score Interpretation	% (n)	Target Achieved?
Developing	6.4% (n = 54)	
Meets Expectations	32.9% (n = 277)	Yes (93.6%)
Exceeds Expectations	60.7% (n = 512)	

The following sections provide more details of students' performance data by different demographic populations. The results indicated that all demographic groups met or exceeded the target of 80%

Table 5 Humanities, Fine Arts, & Ethics Outcome Overall Performance by Demographic

(From All Represented Courses)	Developing n (%within subgroup)	Meets Expectations n (%within subgroup)	Exceeds Expectations n (% within subgroup)	Overall Score Mean (SD)	Target (80%) Achieved?
Gender					
Male (n=544)	34 (6.3%)	169 (31.1%)	341 (62.7%)	2.56 (0.61)	Yes (93.8%)
Female (n=299)	20 (6.7%)	108 (36.1%)	171 (57.2%)	2.51 (0.62)	Yes (93.3%)
Race/Ethnicity					
White (n=379)	21 (5.5%)	115 (30.3%)	243 (64.1%)	2.59 (0.60)	Yes (94.4%)

Black or African American (n=51)	3 (5.9%)	20 (39.2%)	28 (54.9%)	2.49 (0.61)	Yes (94.1%)
Asian (n=213)	14 (6.6%)	68 (31.9%)	131 (61.5%)	2.55 (0.62)	Yes (93.4%)
Hispanic or Latino (n=57)	7 (12.3%)	21 (36.8%)	29 (50.9%)	2.39 (0.70)	Yes (87.7%)
Two or More Races (n=34)	1 (2.9%)	9 (26.5%)	24 (70.6%)	2.68 (0.54)	Yes (97.1%)
Unknown (n=8)	0 (0.0%)	5 (62.5%)	3 (37.5%)	2.38 (0.52)	Yes (100%)
First-Generation College Student					
Continuing Generation (n=665)	42 (6.3%)	222 (33.4%)	401 (60.3%)	2.54 (0.61)	Yes (93.7%)
First Generation (n=77)	4 (5.2%)	16 (20.8%)	57 (74.0%)	2.69 (0.57)	Yes (94.8%)
Citizenship					
Domestic Student (n= 742)	46 (6.2%)	238 (32.1%)	458 (61.7%)	2.56 (0.61)	Yes (93.8%)
International student (n=101)	8 (7.9%)	39 (38.6%)	54 (53.5%)	2.46 (0.64)	Yes (92.1%)
Transfer Student Status					
Transfer Student (n=123)	12 (9.8%)	47 (38.2%)	64 (52.0%)	2.42 (0.67)	Yes (90.2%)
Non-Transfer Student (n=720)	42 (5.8%)	230 (31.9%)	448 (62.2%)	2.56 (0.60)	Yes (94.1%)
Class					
Freshman (n=41)	4 (9.8%)	14 (34.1%)	23 (56.1%)	2.46 (0.67)	Yes (90.2%)
Sophomore (n=159)	16 (10.1%)	60 (37.7%)	83 (52.2%)	2.42 (0.67)	Yes (89.9%)
Junior (n=193)	11 (5.7%)	79 (40.9%)	103 (53.4%)	2.48 (0.60)	Yes (94.3%)
Senior (n=450)	23 (5.1%)	124 (27.6%)	303 (67.3%)	2.62 (0.58)	Yes (94.9%)
GA Residence					
GA Residence (n=496)	33 (9.5%)	141 (40.6%)	173 (49.9%)	2.40 (0.66)	Yes (90.5%)
Out of State Residence (n=347)	21 (4.2%)	136 (27.4%)	339 (68.3%)	2.64 (0.56)	Yes (95.7%)
Course Level					
Lower Division (n=620)	42 (6.8%)	151 (24.4%)	427 (68.9%)	2.62 (0.61)	Yes (93.3%)
Upper Division (n=223)	12 (5.4%)	126 (56.5%)	85 (38.1%)	2.33 (0.57)	Yes (94.6%)

Appendix A: Represented Courses List

Outcomes	Represented Courses	Total
Communication	ENGL 1101, ENGL 1102	2
Quantitative	MATH 1552, MATH 1712	2
Computing	CS 1301, CS 1315, CS 1371	3
Humanities, Fine Arts, and Ethics	Large Class: FREN 1002, SPAN 2001, ID 2202, ID 2241, PHIL 3109, ARCH 2111 Middle Class: LMC 3226, ML 2500 Small Class: LMC 2100, PHIL 4176	10
Natural Sciences, Math, and Technology	CHEM 1310, BIOS 1207DL, EAS 1600, PHYS 2212, MATH 1554, MATH 1711	6
Social Sciences	Large Class: ECON 2100, HIST 2111, HIST 2112, INTA 1200, 2030, POL 1101, PSYC 1101, PSYC 2210, PSYC 2230, SOC 1101 Small Class: ARCH 3135, CP 4020, POL 2101, PUBP 3000, PUBP 3315	15

Appendix B: Represented Courses Associated College

Represented course associated college	Number of courses from the represented course list	Associated outcome
Ivan Allen College of Liberal Arts	19	Communication, Humanities, Fine Arts, and Ethics, Social Sciences
College of Sciences	11	Quantitative, Natural Sciences, Math, and Technology, Social Sciences
College of Design	5	Humanities, Fine Arts, and Ethics, Social Sciences
College of Computing	3	Computing