

# UNIVERSITY CURRICULUM COMMITTEE FOR GENERAL EDUCATION

## MEETING MINUTES

APRIL 3, 2024

ZOOM: [HTTPS://VIRGINIATECH.ZOOM.US/S/84229621673](https://virginiatech.zoom.us/j/84229621673)

2:30 PM – 3:45 PM

**Present:** Angela Anderson, Aaron Ansell, Stephen Biscotti, Aaron Goldstein, Mike Gordon, Corinne Guimont, Molly Hall, Janet Hilder, Earl Kline, Victoria Lael, Nicole Pitterson, Khan Ngoc Tran, Sparkle Williams, Stacy Vogt Yuan

**Absent:** Hailey Annibell, Jason Malone, Annie Ronan, Allison Tobar

**Guests:** Sara Steinert Borella, Jenni Gallagher, Scott Nelson, Brandy Puryear

Call to order by A. Ansell at 2:32

### 1. Study Abroad & Special Study Review

Committee unanimously approved *ENGL 4954 London Calling!* for concept 2 (Critical Thinking in the Humanities & *TA 3954 London Calling!* 2024 Study Abroad for concept 6a (Advanced/Applied Critique and Practice in Design and the Arts).

Committee unanimously approved *PSCI 2954: Machiavelli's Florence*, a study abroad pilot course for concept 3 (Reasoning in the Social Sciences) with the following modifications:

- Remove course mapping from learning objectives.

### 2. Revised Course Proposal Review

Committee unanimously approved *HIST 2624: Topics in the History of Data in Social Context* for concepts 5a (Advanced/Applied Quantitative and Computational Thinking) and 1a (Advanced/Applied Discourse) with the following modification:

- Add language to the SLO's for Quantitative and Computational Thinking to further clarify what quant/comp tools and methods students will be engaging with.

### 3. Overview of New Assessment Process

M. Hall shared the *Pathways Assessment Redesign Sampling Plan*. Committee asked to review the document, respond to M. Hall by Wednesday, April 10<sup>th</sup> (See Appendix A).

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#### 4. Subcommittee Reports

- Advising  
V. Lael shared that the subcommittee reviewed pilot student survey data prepared by the Office of General Education. Advising subcommittee will work with OGE to further analyze the data and make revisions in preparation for next survey.
- Program Improvement  
An update will be provided in UCCGE's May 2024 meeting.

Meeting adjourned by A. Ansell at 3:46

*Minutes Compiled by Brandy Puryear*

# Appendix A

## Pathways Assessment Redesign Sampling Plan March 2024

### Goal of the Assessment Redesign Sampling Plan

The goal of the new Pathways General Education assessment sampling methodology is to collect data from a subset of Pathways course sections that are representative of the Pathways curriculum. This data will be used to inform program improvement efforts. By collecting data from a sample of Pathways course sections, rather than all course sections, more individual support will be able to be provided to instructors engaged in the assessment process. The revised plan aims to improve data quality while lessening the burden on instructors.

### New Assessment Cycle

Beginning in Fall 2024, Pathways assessment will be conducted on a four-year cycle. In Year 1 (e.g., 2024-2025) and Year 2 (e.g., 2025-2026), assessment data will be collected from a sample of course sections each fall and spring semester. In Year 3, faculty working groups will discuss the data collected during Year 1 and Year 2 and develop recommendations for improvements to the Pathways program as needed. In Year 4, any recommended improvements will go through the university governance process as needed.

Table 1. Four-Year Assessment Cycle

Cycle Year	Focus of Activities
Year 1	Assessment data are collected from a sample of course sections
Year 2	Assessment data are collected from a sample of course sections
Year 3	Faculty working groups discuss the data collected and recommend improvements to the Pathways program
Year 4	As needed, recommended improvements go through the university governance process
Cycle starts again with Year 1	Assessment data are collected from a sample of course sections

### Sampling Methodology Overview

A multi-step process will be utilized to develop an appropriate sample of Pathways sections. The first step is to determine the overall number of course sections that should be sampled. The sample needs to be representative of the curriculum and large enough to be able to be used to inform improvement. The next step is to determine the number of course sections that should be sampled for each core concept area. Then, this information will be used to determine the number of courses that should be selected based on course-level enrollments in each area. More detailed information on the sampling methodology is provided below.

#### Sampling Method Step 1: Overall Course Section Determination

The first major step in developing a sample is to determine the number of sections needed to represent the entire population of students taking general education courses at VT. Based on the estimated enrollment population of 80,000 in Fall of 2022 (approximately 79,000 in Spring 2023) with a confidence level of section (e.g., 20)<sup>1</sup>, we determined that approximately 200 sections should be selected. Although there is the potential that some sections will have fewer than 20 students, other sections will have larger enrollments and some of these will likely assess more than 20 students. Therefore, we went with the original estimate of 20 students assessed per course.

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<sup>1</sup> For Pathways sections with more than 20 students enrolled, instructors may choose to report data for a minimum sample of 20 randomly selected students. If enrollment in a section is 20 students or fewer, then all students should be assessed.

### Sampling Method Step 2: Overall Course Sections Needed for Each Core Concept Area

The second step in developing the sample is determining the number of sections that would be needed for each core concept.<sup>2</sup> To do this, we examined the overall Pathways General Education curriculum in terms of the credit hours assigned to each of the core concepts and, if applicable, learning level (i.e., Foundational vs. Advanced/Applied). The concepts as well as the associated credit hours are presented in Table 2 below. For example, Discourse has two types of courses: Foundational and Advanced/Applied. Students are required to take 6 credit hours of Foundational courses and 3 credit hours of Advanced/Applied courses. In contrast, students are only required to take 3 credit hours in the concept area of Critical Analysis of Identity and Equity in the United States.

Table 2. Pathways General Education Curriculum: Credit Hours by Concept and Level

Concept	Credit Hours
Discourse (Foundational)	6
Discourse (Advanced/Applied)	3
Critical Thinking in the Humanities	6
Reasoning in the Social Sciences	6
Reasoning in the Natural Sciences	6
Quantitative and Computational Thinking (Foundational)	6
Quantitative and Computational Thinking (Advanced/Applied)	3
Critique and Practice in Design and the Arts (Arts, Design, or Arts & Design)	6
Critical Analysis of Identity and Equity in the United States	3
Total Credit Hours	45

(For more information about the Pathways General Education curriculum, please visit: <https://www.pathways.prov.vt.edu/structure-concepts-learning-outcomes.html> )

Based on this breakdown, knowing our goal is to obtain a sample of approximately 200 sections, we divided this number by the number of required courses in the Pathways curriculum. The curriculum requires a total of 15 courses which equates to 13.3 course sections required per course. We rounded this number up to 14 per each 3-credit requirement. Table 3 below shows the breakdown of the number of sections to be sampled for each concept by level.

Table 3. Pathways General Education Sampling Requirements: Number of Sections by Concept and Level

Concept	Number of Courses	Number of Sections to be Sampled
Discourse (Foundational)	2	28
Discourse (Advanced/Applied)	1	14
Critical Thinking in the Humanities	2	28
Reasoning in the Social Sciences	2	28
Reasoning in the Natural Sciences	2	28
Quantitative and Computational Thinking (Foundational)	2	28
Quantitative and Computational Thinking (Advanced/Applied)	1	14
Critique and Practice in Design and the Arts (Arts, Design, or Arts & Design)	2	28
Critical Analysis of Identity and Equity in the United States	1	14
Total Number of Sections to be Sampled		210

<sup>2</sup> The two Pathways integrative concepts of (1) Ethical Reasoning and (2) Intercultural and Global Awareness are not included in the tables below since each Pathways course addresses at least one integrative concept. When a section is selected for data collection, the instructor will assess all approved student learning outcomes for the course's core concept(s) and integrative concept(s).

This section sampling amount will remain the same for each semester in Year 1 and Year 2 of the Pathways assessment cycle unless:

- The Pathways curriculum changes in terms of required credit hours or concepts included, and/or
- The total population size for a semester changes substantially.

### Sampling Method Step 3: Determining the Number of Sections to be Sampled in Each Core Concept Based on Course-Level Enrollment

The Pathways General Education curriculum offers courses at a variety of levels. Most concept areas contain courses varying from the 1000-level to the 4000-level. However, the highest percentage of students are enrolled in lower division courses (i.e., 1000- or 2000-level courses). With that in mind, we will group courses into lower division (1000- and 2000-level courses) and upper division (3000- and 4000-level courses) categories. See Tables 4 and 5 presented below.

Table 4. Student Enrollment by Course Level: Fall 2022

	1000 Level	2000 Level	3000 Level	4000 Level	Total
Discourse (Foundational)	4,015 (34.1%)	105 (0.9%)	380 (3.2%)	0 (0.0%)	11,778
Discourse (Advanced/Applied)	0 (0.0%)	3,231 (27.4%)	2,786 (23.7%)	1,261 (10.7%)	
Critical Thinking in the Humanities	3,211 (40.6%)	3,018 (38.2%)	1,438 (18.2%)	241 (3.0%)	7,908
Reasoning in the Social Sciences	7,120 (49.5%)	5,683 (39.5%)	1,266 (8.8%)	325 (2.3%)	14,394
Reasoning in the Natural Sciences	9,147 (58.0%)	6,584 (41.8%)	28 (0.2%)	0 (0.0%)	15,759
Quantitative and Computational Thinking (Foundational)	5,772 (49.3%)	1,578 (13.5%)	0 (0.0%)	0 (0.0%)	11,716
Quantitative and Computational Thinking (Advanced/Applied)	0 (0.0%)	2,500 (21.3%)	1,576 (13.5%)	290 (2.5%)	
Critique and Practice in Design and the Arts (Arts, Design, or Arts & Design)	8,494 (63.1%)	3,556 (26.4%)	1,210 (9.0%)	192 (1.4%)	13,452
Critical Analysis of Identity and Equity in the United States	3,950 (67.7%)	1,478 (25.3%)	157 (2.7%)	247 (4.2%)	5,832

Table 5. Course Sections by Lower Division and Upper Division: Fall 2022

	Lower Division Enrollment (Percent)	Upper Division Enrollment (Percent)	Number of Sections to be Sampled Total	Number of Sections from Lower Division	Number of Sections from Upper Division
Discourse (Foundational)	4,120 (91.6%)	380 (8.4%)	28	26	2
Discourse (Advanced)	3,231 (44.4%)	4,047 (55.6%)	14	6	8
Critical Thinking in the Humanities	6,229 (78.8%)	1,679 (21.2%)	28	22	6
Reasoning in the Social Sciences	12,803 (88.9%)	1,591 (11.1%)	28	25	3
Reasoning in the Natural Sciences	15,731 (99.8%)	28 (0.2%)	28	28	0
Quantitative and Computational Thinking (Foundational)	7,350 (100.0%)	0 (0.0%)	28	28	0
Quantitative and Computational Thinking (Advanced)	2,500 (57.3%)	1,866 (42.7%)	14	8	6

Critique and Practice in Design and the Arts (Arts, Design, and Arts & Design)	12,050 (89.6%)	1,402 (10.4%)	28	25	3
Critical Analysis of Identity and Equity in the United States	5,428 (93.1%)	404 (6.9%)	14	13	1

**Other Considerations When Developing the Pathways Sample**

When developing the final overall sample each semester, several other aspects will be taken into consideration. First, we will be utilizing a sample and replace methodology every semester. If a course section was already selected to participate in another core concept area, this course section will be excluded from selection in other areas. Additionally, except for extremely rare cases, if an instructor was already selected during the current semester or during a previous semester, this instructor will not be required to participate again.

To achieve this, we will maintain a record of what courses, sections, and instructors were sampled each semester. If an instructor is sampled more than once in the same four-year cycle, we will simply switch out this section for a different section of the same course. For courses with only one section, we will sample a different course of the same course-level division altogether. The only exception to this policy would be in the case discussed below regarding courses with sections containing more than 200 students on average.

Potentially for the first two semesters, we will do some oversampling. For each of the concepts by course level, some additional courses proportional to the enrollment across the lower and upper division will be selected. Table 6 contains a breakdown of the oversampling.

Table 6. Oversampling Breakdown

	Number of Sections from Lower Division	Number of Sections from Upper Division
Discourse (Foundational)	3	1
Discourse (Advanced)	1	1
Critical Thinking in the Humanities	3	1
Reasoning in the Social Sciences	3	1
Reasoning in the Natural Sciences	4	0
Quantitative and Computational Thinking (Foundational)	4	0
Quantitative and Computational Thinking (Advanced)	1	1
Critique and Practice in Design and the Arts (Arts, Design, and Arts & Design)	3	1
Critical Analysis of Identity and Equity in the United States	2	0

Additionally, we will sample large-enrollment course sections from each of the core concepts. Large-enrollment course sections are defined as those having more than 200 students on average. A section of each course that falls into this category will be sampled at least once during the four-semester data collection cycle. A list of courses with large-enrollment averages from the Fall 2022 and Spring 2023 semesters is provided in the table below.

Table 7. Courses with Large-Enrollment Average Sections in Each Core Concept Area<sup>3</sup>

Core Concept	Semester(s)	Courses with Large-Enrollment Sections
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<sup>3</sup> The courses presented in Table 7 are those in which average per section enrollments were over 200 students during the Fall 2022 and Spring 2023 semesters. This list could change slightly over the course of the upcoming four-semester data collection cycle for Pathways.

Discourse	Fall, Spring	BMES 2004 (Advanced). When this course is selected, both core concepts will be evaluated.
	Spring	ME 3034 (Advanced)
	Fall	ME 4015 (Advanced)
	Spring	ME 4016 (Advanced)
Critical Thinking in the Humanities	Fall, Spring	ART 1334. When this course is selected, both core concepts will be evaluated.
	Fall	ART 2385. When this course is selected, both core concepts will be evaluated.
	Spring	ART 2386. When this course is selected, both core concepts will be evaluated.
Reasoning in the Social Sciences	Fall, Spring	ARCH 1044/SPIA 1044. When this course is selected, both core concepts will be evaluated.
	Spring	COMM 1014
	Fall	ECON 2005
	Fall, Spring	GEOG 1014
	Fall, Spring	PSYC 1004
Reasoning in the Natural Sciences	Fall	BIOL 1105
	Spring	BIOL 1106
	Fall, Spring	BMES 2004. When this course is selected, both core concepts will be evaluated.
	Fall	CHEM 1015
	Fall	CHEM 1035
	Spring	GEOS 1004
	Fall	PHYS 1055
	Spring	PHYS 2205
	Spring	SPES 2204
Quantitative and Computational Thinking	Fall, Spring	AAEC 2104 (Advanced)
	Fall, Spring	ACIS 1004 (Foundational)
	Fall, Spring	CS 1064 (Foundational)
	Fall	STAT 3604 (Advanced)
Critique and Practice in Design and the Arts	Spring	ALS 1004 (Arts & Design)
	Fall	ART 1334 (Arts). When this course is selected, both core concepts will be evaluated.
	Fall	ART 2385 (Arts). When this course is selected, both core concepts will be evaluated.
	Spring	ART 2386 (Arts). When this course is selected, both core concepts will be evaluated.
	Fall	FA 2004 (Arts)
	Fall	IDS 2114 (Arts)
	Fall, Spring	ITDS 1114 (Arts & Design)
Critical Analysis of Identity and Equity in the United States	Fall, Spring	ARCH 1044/SPIA 1044. When this course is selected, both core concepts will be evaluated.

Course sections selected will assess all concepts/outcomes associated with that course as approved for the Pathways curriculum. This includes assessing the outcomes for the integrative concept(s) associated with the course. For example, if a course section is chosen for Discourse but also contains outcomes from Critical Thinking in the Humanities and Ethical Reasoning, the instructor is responsible for assessing all of the approved outcomes from all three concepts. All data will be utilized even if the instructor was not selected but chooses to collect assessment data and if more students are assessed than is required. Initially, reports will be generated based on the representative sample selected. Then, any additional data that has been submitted will be

incorporated and additional reports will be made available to be used for program improvement. Instructors who submit complete and usable data but were not required to do so will not be selected in upcoming semesters.