CORE CURRICULUM ASSESSMENT REPORT
AY2021-22 (CYCLE C)

November 2022

TEXAS A&M UNIVERSITY

Office of Institutional Effectiveness & Evaluation

Abbreviations & Definitions

AAC&U	American Association of Colleges and Universities
AEFIS	Assessment, Evaluation, Feedback, & Intervention System (a cloud-based assessment management system)
AH	American History (Foundational Component Area)
C	Communication (Foundational Component Area)
CA	Creative Arts (Foundational Component Area)
CARS	Curricular Approval Request System
CCC	Texas A&M University Faculty Senate–Core Curriculum Council
FCA	Foundational Component Area
GPS	Government/Political Sciences
LPC	Language, Philosophy, & Culture (Foundational Component Area)
LPS	Life & Physical Sciences (Foundational Component Area)
M	Mathematics (Foundational Component Area)
OIEE	Office of Institutional Effectiveness & Evaluation
SACSCOC	Southern Association of Colleges and Schools Commission on Colleges
SBS	Social & Behavioral Sciences (Foundational Component Area)
TCC	Texas Core Curriculum

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Executive Summary

As a public institution of higher education, Texas A&M University's general education program is required to meet specific standards laid out by the Texas state legislature and its regional accreditor, the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC).

All current Texas Higher Education Coordinating Board certified core curriculum courses are approved and recertified by the Texas A&M University Faculty Senate—Core Curriculum Council on a scheduled recertification and assessment rotation.

The core curriculum courses are organized into Foundational Component Areas in which a student should acquire and advance defined student learning outcomes. The Foundational Component Areas are: American History; Communication; Creative Arts; Government/Political Sciences; Language, Philosophy, & Culture; Life & Physical Sciences; Mathematics; and Social & Behavioral Sciences.

The Texas Core Curriculum (TCC) refers to the expected learning outcomes as core objectives. These include Communication Skills, Critical Thinking Skills, Empirical & Quantitative Skills, Personal Responsibility, Social Responsibility, and Teamwork.

The core learning objectives assessed for all Foundational Component Areas (FCA) during the 2021-22 academic year were Written Communication, Personal Responsibility, and Empirical & Quantitative Skills. On average, students demonstrated the expected knowledge and skills at the benchmark level for Written Communication and Empirical & Quantitative Skills. On average, students demonstrated the expected knowledge and skills approaching the benchmark level for Personal Responsibility. This report provides results at the institutional, FCA, and campus levels.

Texas Core Curriculum

Description and Outcomes

As a public institution of higher education, Texas A&M University's general education program is required to meet specific standards laid out by the Texas state legislature and its regional accreditor, the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC). The faculty and administrators of Texas A&M University are invested in and focused on assessing the overall effectiveness of the general education program.

Core Objectives

The Texas A&M University Core Curriculum and related core objectives are required by statute (see Texas Administrative Code TAC Title 19 § 4.28). This code stipulates that through the mandated core curriculum, "students will gain a foundation of knowledge of human cultures and the physical and natural world, develop principles of personal and social responsibility for living in a diverse world, and advance intellectual and practical skills that are essential for all living." The state code further stipulates that through the core curriculum, students will be prepared for contemporary challenges by developing and demonstrating the following **core objectives**.

- **Communication Skills**: to include effective development, interpretation, and expression of ideas through written, oral, and visual communication.
- **Critical Thinking Skills**: to include creative thinking, innovation, inquiry, and analysis, evaluation, and synthesis of information.
- **Empirical & Quantitative Skills**: to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.
- **Personal Responsibility**: to include the ability to connect choices, actions, and consequences to ethical decision-making.
- **Social Responsibility**: to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities.
- **Teamwork**: to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.

As a state institution governed by requirements set forth in Texas Education Code, Texas A&M University has adopted these core objectives as its collegiate-level general education competencies to be achieved through students' successful completion of the core curriculum.

Foundational Component Areas

The core curriculum courses are organized into the following **Foundational Component Areas (FCA)** in which a student should acquire and advance defined student learning outcomes the Texas Core Curriculum (TCC) refers to as Core Objectives. Texas Administrative Code states, "Although the courses included in the TCC may vary by institution, every Texas higher education institution's core curriculum must include the following Foundational Component Areas" (TAC Title 19 § 4.28):

- **American History (AH)**: Courses in this category focus on the consideration of past events and ideas relative to the United States, with the option of including Texas History for a portion of this component area. Courses involve the interaction among individuals, communities, states, the nation, and the world, considering how these interactions have contributed to the development of the United States and its global role.
- **Communication (C)**: Courses in this category focus on developing ideas and expressing them clearly, considering the effect of the message, fostering understanding, and building the skills needed to communicate persuasively. Courses involve the command of oral, aural, written, and visual literacy skills that enable people to exchange messages appropriate to the subject, occasion, and audience.
- **Creative Arts (CA)**: Courses in this category focus on the appreciation and analysis of creative artifacts and works of the human imagination. Courses involve the synthesis and interpretation of artistic expression and enable critical, creative, and innovative communication about works of art.
- **Government/Political Sciences (GPS)**: Courses in this category focus on consideration of the Constitution of the United States and the constitutions of the states, with special emphasis on that of Texas. Courses involve the analysis of governmental institutions, political behavior, civic engagement, and their political and philosophical foundations.
- **Language, Philosophy, & Culture (LPC)**: Courses in this category focus on how ideas, values, beliefs, and other aspects of culture express and affect human experience. Courses involve the exploration of ideas that foster aesthetic and intellectual creation to understand the human condition across cultures.
- **Life & Physical Sciences (LPS)**: Courses in this category focus on describing, explaining, and predicting natural phenomena using the scientific method. Courses involve the understanding of interactions among natural phenomena and the implications of scientific principles on the physical world and on human experiences.
- **Mathematics (M)**: Courses in this category focus on quantitative literacy in logic, patterns, and relationships. Courses involve the understanding of key mathematical concepts and the application of appropriate quantitative tools to everyday experience.
- **Social & Behavioral Sciences (SBS)**: Courses in this category focus on the application of empirical and scientific methods that contribute to the understanding of what makes us

human. Courses involve the exploration of behavior and interactions among individuals, groups, institutions, and events, examining their impact on the individual, society, and culture.

State policy requires colleges and universities to approve core curriculum courses in these FCAs, gather evidence of student learning, and demonstrate effort of continuous improvement. The regional accreditor for institutions in Texas, SACSCOC, also requires documentation of continuous improvement efforts for collegiate-level general education for its undergraduate degree programs (Section 8, Standard 8.2.b).

Assessment Methodology

Course Selection

All current Texas Higher Education Coordinating Board certified core curriculum courses are recertified by the Texas A&M University Faculty Senate–Core Curriculum Council (CCC) through a two-part process which occurs over a four-year cycle (resulting in four separate cohorts).

Recertification is a two-year process: In Year 1, student-produced work is collected by OIEE for centralized assessment. Assessment results are shared with the CCC and instructors. Then, in Year 2, faculty prepare and submit a description of practice as part of the recertification curricular review conducted by the CCC. The faculty description of practice describes representative practice across the sections of the course for addressing the core learning objectives, as well as how assessment data from Year 1 has informed pedagogical practice at a course level.

Instructors for each core course are responsible for addressing the FCA requirements and applicable core objectives every time the course is taught. However, courses are assigned to one of four cohorts continuously rotating through recertification over a four-year period. Cohort assignments are based on student enrollment and the year in which a course is initially approved for the core, ensuring each course goes through a curricular review every four years. The student learning outcome data collected by OIEE for the centralized assessment of core learning objectives is based on a three-year scheduled assessment rotation. The standard cycle of assessment of learning objectives for centralized assessment includes a three-year rotation of the core learning objectives among cohorts detailed in the table below.

Centralized Assessment Objective Rotation Schedule

Rotation 1	Rotation 2	Rotation 3
Visual Communication Oral Communication Teamwork	Critical Thinking Social Responsibility	Written Communication Personal Responsibility Empirical & Quantitative Skills

These two rotating cycles (centralized assessment and recertification) occur concurrently to ensure each course in the core curriculum provides evidence of student learning of the core learning objectives aligned with the mandatory core learning objectives at least four times across a 12-year period. See assessment.tamu.edu for specific course scheduled rotations.

The list of courses up for recertification in a given academic year is sent to the academic departments. During the first year of the process, all sections of the identified course taught during the long semesters (fall and spring) submit student-produced work aligned to the assigned core objective(s) to the OIEE. OIEE facilitates the scoring of artifacts (student-produced work) on the designated rubric,

reporting results at the FCA-level and, for courses with more than one section/instructor, course level. During the second year of the process, an appointed representative from the department offering the course will complete recertification documentation using the Curricular Approval Request System (CARS) for the CCC to review for the final recertification decision. This process intentionally separates the curricular review process recertification and the centralized assessment of the core objectives.

The CCC evaluates the CARS forms and confirms with OIEE to ensure assessment requirements were met before recertifying a course for another four years. Centralized assessment results are shared with the CCC, academic departments, and university administration to demonstrate the intentional assessment for continuous improvement of the required core objectives as well as compliance with state and regional accreditation mandates.

Artifacts

Artifacts, or student-produced work, vary in assessment design. Prominent designs include essays, research papers, lab reports, written assignments, objective-specific exam questions, recorded audio/video presentations, portfolios, or demonstrations to which a rubric—or other detailed criteria—are applied.

Artifacts are collected from each section of a course for fall and spring semesters. Artifacts are compiled across sections at the course level and reviewed for validity. For valid artifacts, a random but proportional sample is pulled for centralized assessment using the appropriate rubric for the core learning objective.

Rubrics

Analytic scoring rubrics are implemented to assess artifacts' demonstrated proficiency in each learning objective using an 8-point criterion scale (see Appendices A-D). The rubrics were collaboratively constructed and approved by the CCC based on research conducted by OIEE, rubrics previously developed by Texas A&M faculty, and the VALUE rubrics developed by the American Association of Colleges and Universities (AAC&U).

During the 2021-22 academic year, four rubrics were used to assess the core learning objectives of Written Communication, Personal Responsibility, and Empirical & Quantitative Skills.

The Written Communication Rubric (See Appendix A) has five criteria that are adapted from the AAC&U Written Communication VALUE Rubric:

- Context of and Purpose for Writing (*includes considerations of audience, purpose, and the circumstances surrounding the writing task(s))*
- Content Development
- Genre and Disciplinary Conventions (*formal and informal rules inherent in the expectations for writing in particular forms and/or academic fields*)
- Sources and Evidence
- Control of Syntax and Mechanics

The Personal Responsibility Rubric (See Appendix B) has three criteria that are adapted from AAC&U Ethical Reasoning and Problem Solving VALUE Rubrics:

- Identification and Description of Ethical Issue
- Evaluation of Student Position and Other Perspectives
- Consequences of Action Implementation

Empirical & Quantitative Skills were assessed with one of two rubrics, applied based on the artifacts.

The Empirical & Quantitative Skills Computational Rubric (See Appendix C) has three criteria that are adapted from the Mathematics Empirical & Quantitative Skills Rubric developed by Texas A&M faculty:

- Set Up
- Computation
- Interpretation

The Empirical & Quantitative Skills Other Rubric (See Appendix D) has three criteria that are adapted from the Social & Behavioral Sciences Empirical & Quantitative Skills Rubric developed by Texas A&M faculty:

- Presentation of Numerical Data/Observable Facts
- Analysis/Conclusions
- Methods (*used only when students generated their own data set*)

Achievement Levels

Achievement-level definitions generally describe the expectations for evidence of student learning at each of the primary achievement levels. Mid-points between the primary achievement levels are indicated by the prefix “pre.” The score range of 4.00-4.99, or *developing*, is the standard achievement level affirmed by the CCC.

Achievement Level and Description by Score Range		
Score Range	**Achievement Level**	**Description**
8.00	Advanced	Evidence of student learning met all or most of the criteria for the advanced category, exceeding expectations.
7.00-7.99	Pre-advanced	Evidence of student learning met some of the criteria for both advanced and competent categories, exceeding expectations.
6.00-6.99	Competent	Evidence of student learning met all or most of the criteria for the competent category, exceeding expectations.
5.00-5.99	Pre-competent	Evidence of student learning met some of the criteria for both competent and developing categories, exceeding expectations.
4.00-4.99	**Developing**	**Evidence of student learning met all or most of the criteria for the developing category, meeting standard expectations.**
3.00-3.99	Pre-developing	Evidence of student learning met some of the criteria for both developing and beginner categories, nearly meeting expectations.
2.00-2.99	Beginner	Evidence of student learning met all or most of the criteria for the beginner category, not meeting expectations.
1.00-1.99	Pre-beginner	Evidence of student learning met some of the criteria for both beginner and not present categories, not meeting expectations.
0.00-0.99	Not present	Evidence of student learning met all or most of the criteria for the not present category, not meeting expectations.

Scoring

The scoring team, comprised of assessment staff members in OIEE, apply the rubrics to randomly selected artifacts. OIEE hires scoring staff with expertise in the core learning objectives and a majority of the FCA disciplines to serve as core curriculum assessment scorers.[1] A scoring supervisor leads the scoring team through calibration exercises using the scoring rubric, benchmark artifacts, and scoring anchor sets. Once a scorer qualifies to score by demonstrating the standard expected level of agreement for each criterion, the scorer is certified to score for the core learning objective.

During scoring, interrater reliability is consistently monitored to ensure standard agreement rates. Where scorer agreement exceeds adjacent achievement levels, the artifact is escalated to the scoring supervisor for review and rating confirmation. If a scorer's rating consistently exceeds the bounds of standard agreement rates, the scorer undergoes recalibration and recertification as a scorer. If recertification is not achieved during recalibration, the scorer is dismissed from the scoring team.

[1] "Expert" is defined as having a masters level degree or higher from a discipline within the FCA.

Findings

The purpose of this section is to describe the assessment results the AY 2021-22 assessment schedule (Cycle C). Evidence of student learning was collected in Fall 2021 and Spring 2022 across three campuses (College Station, Galveston, and Qatar) for the state-mandated learning objectives of:

- Written Communication
- Personal Responsibility
- Empirical & Quantitative Skills

The score range of 4.00-4.99, or the *developing* achievement level, is the standard achievement level affirmed by the CCC. For Written Communication, overall student achievement met the benchmark of *developing*. For Personal Responsibility, student achievement was overall at the *pre-developing* level, approaching the benchmark. Overall, student achievement in Empirical & Quantitative Skills met the benchmark of *developing*.

Written Communication

Student achievement in Written Communication reached *developing* or *pre-developing* levels. 2,120 total artifacts, collected from all three campuses, were assessed.

Across the institution, achievement was highest in the Control of Syntax and Mechanics criterion. Achievement was lowest in the Sources and Evidence criterion. This trend was consistent across the three campuses (see Appendix E).

Written Communication Institutional Results—All Campuses (*n*=2,120)			
Criterion	**Mean**	**SD**	**Achievement Level**
Context of and Purpose for Writing	4.31	1.05	Developing
Content Development	4.01	1.05	Developing
Genre and Disciplinary Conventions	3.68	1.06	Pre-developing
Sources and Evidence	3.22	1.07	Pre-developing
Control of Syntax and Mechanics	4.59	1.04	Developing

At the FCA level, student achievement in Communication was highest in all rubric criteria, reaching *developing* or *pre-competent* levels. Student achievement in Social & Behavioral Sciences was also *developing* or *pre-competent* in all rubric criteria. In all FCAs, Sources and Evidence was the area for most improvement.

Written Communication FCA Results								
Criterion	**AH**	**C**	**CA**	**GPS**	**LPC**	**LPS**	**M**	**SBS**
Context of and Purpose for Writing	4.06	4.96	3.52	3.82	4.52	3.87	4.00	4.83
Content Development	3.99	4.73	3.24	3.00	4.27	3.53	3.62	4.60
Genre and Disciplinary Conventions	3.96	4.59	2.97	2.97	4.00	3.03	3.25	4.23
Sources and Evidence	2.80	4.08	2.61	2.02	3.28	2.67	2.44	4.04
Control of Syntax and Mechanics	4.56	5.29	4.09	3.79	4.84	4.08	4.23	5.13

Personal Responsibility

Student achievement in Personal Responsibility reached *pre-developing* or *beginner* levels. 588 total artifacts, collected from all three campuses, were assessed.

Across the institution, achievement was highest in the Identification and Description of Ethical Issue criterion and lowest in the Consequences of Action Implementation criterion. This trend was consistent across the three campuses (see Appendix F).

Personal Responsibility Institutional Results—All Campuses (*n*=588)			
Criterion	**Mean**	**SD**	**Achievement Level**
Identification and Description of Ethical Issue	3.90	1.07	Pre-developing
Evaluation of Student Position and Other Perspectives	3.23	1.06	Pre-developing
Consequences of Action Implementation	2.62	1.08	Beginner

At the FCA level, student achievement was the highest in all rubric criteria in Language, Philosophy, and Culture. FCA-level results reflected institutional trends with the highest achievement in

Identification and Description of Ethical Issue and lowest in the Consequences of Action Implementation criterion.

Personal Responsibility FCA Results				
Criterion	**AH**	**C**	**GPS**	**LPC**
Identification and Description of Ethical Issue	4.03	3.48	3.80	4.39
Evaluation of Student Position and Other Perspectives	3.07	3.28	2.71	3.61
Consequences of Action Implementation	2.58	2.74	1.90	2.94

Empirical & Quantitative Skills

Overall, results indicate that student achievement of Empirical & Quantitative Skills met the benchmark of *developing*. 1,133 total artifacts, collected from all three campuses, were assessed.

Results are divided by the rubric applied.[2] Student achievement in the Empirical & Quantitative Skills Other Rubric reached the benchmark of *developing* in all rubric criteria. Student achievement in the Empirical & Quantitative Skills Computational Rubric met or approached the benchmark.

The Empirical & Quantitative Skills Computational Rubric was applied to 461 artifacts. Across the institution, achievement was highest in the Set Up criterion and lowest in Interpretation. College Station results followed this trend; however, achievement was highest in Computation for Galveston and Qatar campuses (See Appendix G).

[2] The Empirical & Quantitative Skills Computational Rubric was applied to all artifacts from Mathematics. The Empirical & Quantitative Skills Other Rubric was applied to the majority (approximately 98%) of artifacts collected from Social & Behavioral Sciences. The Empirical & Quantitative Skills Other Rubric was applied to approximately 60% of artifacts collected from Life & Physical Sciences.

Empirical & Quantitative Skills Computational Rubric Institutional Results—All Campuses (*n*=461)			
Criterion	**Mean**	**SD**	**Achievement Level**
Set Up	4.64	1.13	Developing
Computation	4.39	1.12	Developing
Interpretation	3.48	1.18	Pre-developing

At the FCA level, student achievement in Life & Physical Sciences was the highest in all rubric criteria, demonstrating *developing* or *pre-competent* levels. Results from Mathematics and Life & Physical Sciences reflected institutional trends with highest achievement in Set Up and lowest in Interpretation. Social & Behavioral Sciences demonstrated highest achievement in the Computation category.

Empirical & Quantitative Skills Computational Rubric FCA Results			
Criterion	**LPS**	**M**	**SBS**[3]
Set Up	5.10	4.23	0.33
Computation	4.81	3.91	4.58
Interpretation	4.22	2.72	0.42

The Empirical & Quantitative Skills Other Rubric was applied to 672 artifacts, collected from College Station and Galveston. Student achievement in all rubric categories reached the benchmark of *developing*. Across the institution, achievement was highest in Presentation of Numerical Data/Observable Facts and lowest in Analysis/Conclusions. These trends were consistent across the two campuses (see Appendix G).

[3] *n*=6

Empirical & Quantitative Skills Other Rubric Institutional Results—All Campuses (*n* =672)			
Criterion	**Mean**	**SD**	**Achievement Level**
Presentation of Numerical Data/Observable Facts	4.97	1.02	Developing
Analysis/Conclusions	4.66	1.03	Developing
Methods (used only when student is generating their own data set)	4.71	1.09	Developing

At the FCA level, the highest achievement level for Presentation of Numerical Data/Observable Facts and Analysis/Conclusions criteria was in Social & Behavioral Sciences. The highest achievement in Methods was in Life & Physical Sciences.

Empirical & Quantitative Skills Other Rubric FCA Results		
Criterion	**LPS**	**SBS**
Presentation of Numerical Data/Observable Facts	4.87	5.07
Analysis/Conclusions	4.40	5.07
Methods (used only when student is generating their own data set)	5.15	2.46[4]

[4] *n*=39

How to Use Results for Continuous Improvement

- Review results for each component of the rubric and identify areas for improvement.
- Refer to support resources, including assignment checklists and rubrics, available at assessment.tamu.edu.
- Contact OIEE for assistance in selecting artifacts for assessment at assessment@tamu.edu.
- At the course level,
    - use objective-specific assignments to assess student learning of the core objective using the associated scoring rubric and
    - use formative assessment strategies to collect and analyze data annually to evaluate student learning of the core objectives and to pilot initiatives for improvement.
- Strengthen continuity of student learning outcomes for courses across sections, semesters, modalities, and campuses.
- Submit the assessment instrument planned for use in the assessment of the core learning objectives with the recertification application for review by the CCC.

NOTE: Course level results may be available upon request. Email assessment@tamu.edu for more information.

Appendix A: Written Communication Rubric[5]

	Advanced 8	7	Competent 6	5	Developing[6] 4	3	Beginner 2	1	Not Present 0
Context of and Purpose for Writing *Includes considerations of audience, purpose, and the circumstances surrounding the writing task(s)*	Demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work.		Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context).		Demonstrates awareness of context, audience, purpose, and to the assigned tasks(s) (e.g., begins to show awareness of audience's perceptions and assumptions).		Demonstrates minimal attention to context, audience, purpose, and to the assigned tasks(s) (e.g., expectation of instructor or self as audience).		No apparent context or purpose demonstrated.
Content Development	Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding, and shaping the whole work.		Uses appropriate, relevant, and compelling content to explore ideas within the context of the discipline and shape the whole work.		Uses appropriate and relevant content to develop and explore ideas through most of the work.		Uses appropriate and relevant content to develop simple ideas in some parts of the work.		Content unrelated to topics.
Genre and Disciplinary Conventions *Formal and informal rules inherent in the expectations for writing in particular forms and/or academic fields*	Demonstrates detailed attention to and successful execution of a wide range of conventions particular to a specific discipline and/or writing task (s) including organization, content, presentation, formatting, and stylistic choices.		Demonstrates consistent use of important conventions particular to a specific discipline and/or writing task(s), including organization, content, presentation, and stylistic choices.		Follows expectations appropriate to a specific discipline and/or writing task(s) for basic organization, content, and presentation.		Attempts to use a consistent system for basic organization and presentation.		No identifiable system or organization used.
Sources and Evidence	Demonstrates skillful use of high- quality, credible, relevant sources to develop ideas that are appropriate for the discipline and genre of the writing.		Demonstrates consistent use of credible, relevant sources to support ideas that are situated within the discipline and genre of the writing.		Demonstrates an attempt to use credible and/or relevant sources to support ideas that are appropriate for the discipline and genre of the writing.		Demonstrates an attempt to use sources to support ideas in the writing.		No evidence or sources used to support ideas.
Control of Syntax and Mechanics	Uses graceful language that skillfully communicates meaning to readers with clarity and fluency and is virtually error- free.		Uses straightforward language that generally conveys meaning to readers. The language in the portfolio has few errors.		Uses language that generally conveys meaning to readers with clarity, although writing may include some errors.		Uses language that sometimes impedes meaning because of errors in usage.		Misuse of language seriously impedes understanding.

[5] Adapted from the AAC&U Written Communication VALUE Rubric.

[6] The score range of 4.00-4.99, or *developing*, is the standard achievement level affirmed by the CCC.

Appendix B: Personal Responsibility Rubric[7]

	Advanced 8	7	Competent 6	5	Developing[8] 4	3	Beginner 2	1	Not Present 0
Identification and Description of Ethical Issue	Ethical issue is stated and described from multiple perspectives, providing a thorough summary of the complexities involved with the issue.		Ethical issue is stated and described from a single perspective, but acknowledges other perspectives or sides to the issue.		Ethical issue is stated and described from own/single perspective. May either imply or state that the description provided is the only perspective/point of view to consider.		Ethical issue is stated without clarification or description.		No ethical issue identified.
Evaluation of Student Position and Other Perspectives	States and defends a specific position while considering the complexities of the issue and providing counterarguments for potential (specific) objections.		States and defends a specific position while identifying potential (specific) objections those with other perspectives may have to their stance.		States a position and includes a thoughtful defense/argument for their stance.		States a position but does not include a defense/argument for their stance.		No position communicated.
Consequences of Action Implementation	Articulates an informed action to address the ethical issue and evaluates the broader consequences of the proposed action/ intervention.		Articulates an informed action to address the ethical issue, acknowledging the presence of broader consequences of the proposed action/ intervention.		Identifies an action to address the ethical issue without acknowledging broader consequences of the proposed action/intervention.		States a need for action to address the identified ethical issue without discussing possible actions or the broader consequences of possible actions (Or identifies an implied action with no acknowledgement of consequences).		No consequences stated.

[7] Adapted from the AAC&U Ethical Reasoning & Problem Solving VALUE Rubrics.

[8] The score range of 4.00-4.99, or *developing*, is the standard achievement level affirmed by the CCC.

Appendix C: Empirical & Quantitative Skills Computational Rubric[9]

	Advanced 8	**7**	**Competent 6**	**5**	**Developing [10] 4**	**3**	**Beginner 2**	**1**	**Not Present 0**
Set Up	Efficiently represents problem in its entirety.		Represented problem adequately, but not in the most efficient or complete way.		Represented with some relationship to the problem.		Represented with little to no relationship to the problem.		No response.
Computation	Calculations include no significant errors.		Calculations include few errors.		Calculations include some errors.		Calculations are inaccurate or inappropriate.		Calculation not attempted.
Interpretation	Results are competently and Thoroughly interpreted with no significant errors.		Results are competently interpreted, but with minor omissions or inaccuracies.		Results are partially or incorrectly represented.		Results are not interpreted in the context of the question.		No results offered.

[9] Adapted from the 2014 Texas A&M developed Mathematics Empirical & Quantitative Skills Rubric.

[10] The score range of 4.00-4.99, or *developing*, is the standard achievement level affirmed by the CCC.

Appendix D: Empirical & Quantitative Skills Other Rubric[11]

	Advanced 8	7	Competent 6	5	Developing [12] 4	3	Beginner 2	1	Not Present 0
Presentation of Numerical Data/ Observable Facts	Synthesizes numerical data/observable facts with the specific problem/topic being investigated. Results are presented in a concise and efficient manner demonstrating a deep understanding of the problem/topic as a result of the data.		Connections between numerical data/ observable facts to the problem/topic being investigated are explicit and appropriate. Results are organized and demonstrate a data-informed understanding of the problem/topic.		Connections between numerical data/observable facts to the problem/topic being investigated may be implicit. Results are loosely organized and demonstrate a simplistic understanding of the problem/topic.		Limited or ineffectual presentation of sufficient data/observable facts in order to make a connection to the problem/topic.		No results presented.
Analysis/ Conclusions	Draws meaningful, Independent conclusions based on numerical data/observable facts. Conclusions demonstrate a sophisticated understanding of the problem/topic.		Draws appropriate, independent conclusions based on numerical data/observable facts. Conclusions demonstrate a sufficient understanding of the problem/topic.		Presents independent conclusions based on numerical data/observable facts. Conclusions demonstrate a surface-level understanding of the problem/topic.		Presents limited or weak conclusions based on numerical data/observable facts. Conclusions may include obvious judgements about the problem/topic rather than drawing independent conclusion.		No attempt to draw conclusions
Methods— Used only when student is generating their own data set	Methods (theories/principles underlying design, subjects, instruments, data collection, and analyses) are formed from a theoretical framework, are organized and described with sufficient clarity.		Methods (design, subjects, instruments, data collection, and analyses) are organized and described with sufficient clarity.		Methods (design, subjects, instruments, data collection, and analyses) are organized.		Missing or loosely organized methods used to describe research design, subjects, instruments, data collection, and analyses.		No methods presented.

[11] Adapted from the 2014 Texas A&M developed Social & Behavioral Sciences Empirical & Quantitative Skills Rubric.

[12] The score range of 4.00-4.99, or *developing*, is the standard achievement level affirmed by the CCC.

Appendix E: Written Communication Campus Results

Written Communication College Station Results (*n*=1,993)			
Criterion	**Mean**	**SD**	**Achievement Level**
Context of and Purpose for Writing	4.32	1.05	Developing
Content Development	4.03	1.05	Developing
Genre and Disciplinary Conventions	3.70	1.06	Pre-developing
Sources and Evidence	3.25	1.06	Pre-developing
Control of Syntax and Mechanics	4.61	1.04	Developing

Written Communication Galveston Results (*n*=107)			
Criterion	**Mean**	**SD**	**Achievement Level**
Context of and Purpose for Writing	3.95	1.00	Pre-developing
Content Development	3.67	1.06	Pre-developing
Genre and Disciplinary Conventions	3.31	1.07	Pre-developing
Sources and Evidence	2.75	1.08	Beginner
Control of Syntax and Mechanics	4.18	1.05	Developing

Written Communication Qatar Results (*n*=20)			
Criterion	**Mean**	**SD**	**Achievement Level**
Context of and Purpose for Writing	5.00	1.00	Pre-competent
Content Development	4.45	1.04	Developing
Genre and Disciplinary Conventions	4.30	1.05	Developing
Sources and Evidence	3.03	1.07	Pre-developing
Control of Syntax and Mechanics	5.10	1.04	Pre-competent

Appendix F: Personal Responsibility Campus Results

Personal Responsibility College Station Results (*n*=502)			
Criterion	**Mean**	**SD**	**Achievement Level**
Identification and Description of Ethical Issue	3.95	1.06	Pre-developing
Evaluation of Student Position and Other Perspectives	3.25	1.06	Pre-developing
Consequences of Action Implementation	2.58	1.07	Beginner

Personal Responsibility Galveston Results (*n*=71)			
Criterion	**Mean**	**SD**	**Achievement Level**
Identification and Description of Ethical Issue	3.71	1.06	Pre-developing
Evaluation of Student Position and Other Perspectives	3.23	1.09	Pre-developing
Consequences of Action Implementation	2.89	1.13	Beginner

Personal Responsibility Qatar Results (*n*=15)			
Criterion	**Mean**	**SD**	**Achievement Level**
Identification and Description of Ethical Issue	3.23	1.38	Pre-developing
Evaluation of Student Position and Other Perspectives	2.70	1.14	Beginner
Consequences of Action Implementation	2.47	1.26	Beginner

Appendix G: Empirical & Quantitative Skills Campus Results

Empirical & Quantitative Skills Computational Rubric College Station Results (*n*=417)			
Criterion	**Mean**	**SD**	**Achievement Level**
Set Up	4.77	1.10	Developing
Computation	4.33	1.13	Developing
Interpretation	3.63	1.15	Pre-developing

Empirical & Quantitative Skills Computational Rubric Galveston Results (*n*=40)			
Criterion	**Mean**	**SD**	**Achievement Level**
Set Up	3.35	1.26	Pre-developing
Computation	5.13	1.11	Pre-competent
Interpretation	1.89	1.78	Pre-beginner

Empirical & Quantitative Skills Computational Rubric Qatar Results (*n*=4)			
Criterion	**Mean**	**SD**	**Achievement Level**
Set Up	3.13	1.15	Pre-developing
Computation	3.88	1.15	Pre-developing
Interpretation	0.00	1.15	Not present

Empirical & Quantitative Skills Other Rubric College Station Results (*n*=652)			
Criterion	**Mean**	**SD**	**Achievement Level**
Presentation of Numerical Data/Observable Facts	4.99	1.02	Developing
Analysis/Conclusions	4.69	1.03	Developing
Methods (used only when student is generating their own data set)	4.71	1.09	Developing

Empirical & Quantitative Skills Other Rubric Galveston Results (*n*=20)			
Criterion	**Mean**	**SD**	**Achievement Level**
Presentation of Numerical Data/Observable Facts	4.29	1.03	Developing
Analysis/Conclusions	3.94	1.03	Pre-developing
Methods (used only when student is generating their own data set)	N/A	N/A	N/A

Office of Institutional Effectiveness & Evaluation

Purpose

The goal of assessment is to use data to make informed decisions about teaching, learning, program delivery, equity, and overall institutional effectiveness. Engaging in systematic, integrated, and thoughtful assessment of student learning, the student learning experience, and administrative and support functions helps our campus to ensure a high-quality, equitable experience for all students. OIEE is committed to this endeavor and to assisting our faculty and staff in the continuous improvement of their programs and processes.

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