



GenEd Report

2019-2024



Report on General Education Assessment

General Education courses at CVCC help ensure a broad background of various academic disciplines and help to prepare students to pursue additional education and also perform more effectively in the workplace. In addition, General Education courses help students begin to think critically about the world around them and engage in critical thought and synthesis, which will not only better prepare them for their ultimate academic goals, but better prepare them to be well-rounded contributors to society in general. General Education courses do not narrowly focus on skills, techniques, and/or procedures of a specific occupation or profession. General Education core requirements for AA, AS, and AAS degrees adhere and align to common and acceptable practices within Higher Education.

Chattahoochee Valley Community College (CVCC) measures the effectiveness of its general education program using multiple direct and indirect assessments. The Report on General Education Assessment is a summative composite of data collected from faculty assessments and random sampling of student's artifacts during the 2023-2028 Strategic Planning cycle.

Each fall, division chairs begin the process of creating a general education portfolio for CVCC. The process is as follows:

1. Annually, the five-general education/associate degree outcomes (Writing, Speech, Math, Science, and Technology) are assessed.
2. In the fall, department chairs meet with faculty to ensure there is agreement on the identified student learning outcomes (SLOs) and assessment tools that are in place.
3. The general education faculty members, assigned general education SLOs, collect the assessment data to the specific course. Additionally, the assessment data is collected from student work in identified traditional, online, and hybrid courses.
4. Annually, the assessment of the data takes place during fall and spring semesters.
5. Annually, the results from the assessments are entered in the College's Unit Plan platform for each area by the department chairs by the end of August.
6. Division meetings are held to discuss the results and determine needed changes, if need.
7. The division chairs enter the *Use of Results* in the Unit Plans and develop action plans for improvement.
8. If a change requires funding beyond the normal operating expenses for the department, a Budget Form B is completed the following spring.

College-Level General Education Student Learning Outcomes

CVCC assesses the General Education Program in the following areas: writing, speech, math, science, and technology. Faculty members teaching general education courses assess the effectiveness of courses in preparing students to master the student learning outcomes (SLO).

Summary of the 2018-2023 Cycle - Writing

Students showed a marked improvement in lessening their usage of major errors in their writing over the 2018-2023 cycle. Student writing moved from 70% of student essays containing major errors to just 37% containing major errors. However, the commission of major errors is a consistent part of student writing. The elimination of errors in student writing is a goal towards which we continue to strive.

Student Learning Outcome 1: Writing

Students will write sentences and paragraphs in Standard English that are sequential, logical, and effectively organized. The SLO assesses effective writing skills by evaluating essays for major errors.

Assessment Results: The random sample of ENG 101 papers indicated that 56% student essays were free of major errors. This means 44% are struggling to produce writing free of run-on sentences, sentence fragments, and subject/verb agreement errors. Table 1 reflects the data collected on the commission of major errors. The random sample of ENG 102 papers indicated that 50% student essays were free of major errors. This means 50% are struggling to produce writing free of run-on sentences, sentence fragments, and subject/verb agreement errors. Table 1 reflects the data collected on the commission of major errors.

Table 1 ENG 101 and ENG 102

Academic Year	Commission of Major Errors in	Commission of Major Errors in ENG 102 Papers
2023-24	44%	50%
2024-25		
2025-26		
2026-27		
2027-28		

Action Taken for Improvement: Composition classes have been further moved on campus, reducing the number of online sections to one per semester. Instructors are continuing to grow opportunities for meaningful feedback through student conferencing and peer review opportunities. EdReady has been made available to all ENG students in order to address weaknesses in grammar and mechanics.

Use of Results: Mid-year Review conducted-no changes because data isn't gathered until the end of the academic year. The fact that the percentages of major errors in ENG 101 are holding fairly steady from years past is encouraging as we've experienced major changes in instruction over the last few years. Because we have seen the number of errors hold steady, it is clear that students are benefiting from increased in-person classes and the peer revision that goes with it.

Summary of the 2018-2023 Cycle - Speech

Students' proficiency and mastery of verbal and non-verbal communication has improved drastically since 2020 through our use of consistent rubrics and expanded examples through instruction. The goal is continued growth by increasing the level of mastery as we move into the next assessment cycle.

Student Learning Outcome 2: Speech

Students will demonstrate oral communication competencies using unity of thought and logical arrangement of ideas. This SLO focuses on effective oral communication skills in Public Speaking 107 using an oral speech rubric.

Assessment Results: The random sample of SPH 107 Informative speech rubrics indicated that 75% of the students met the benchmark for proficiency in the area of delivery verbal and non-verbal communication. Students' proficiency in verbal and non-verbal communication decreased by 10% from the previous academic year. Table 2 demonstrates the results of the oral communication SLO:

Table 2: Public Speaking 107

Academic Year	Proficiency of Verbal/Non-Verbal Communication
2023-24	75%
2024-25	
2025-26	
2026-27	
2027-28	

Use of Results: Mid-year Review conducted-no changes because data isn't gathered until the end of the academic year. The data showed that most students met the benchmark for verbal and non-verbal communication, while it decreased from the previous year. This indicated faculty should continue to provide sample resources, refine instruction, and employ digital learning activities focused on delivery. Faculty efforts are effective, and consistency will continue to show results.

Action Taken for Improvement: This academic year there were more online offerings of SPH 107. The decrease in proficiency indicates that more examples and visual resources should be included in course shells. In-person students will continue to have the opportunity to have real-time practice and instruction on how to engage the audience through delivery. Online learners will be offered more opportunities to practice this skill before a major speech assessment.

Summary of the 2018-2023 Cycle - Math

The math curriculum was restructured based on the recommendation of the ACCS College Readiness Task Force to follow a co-requisite model to increase the number of students entering college-level math. MTH 098 Elementary Algebra transitioned to a four-credit hour developmental math course. ACCS implemented co-requisite learning support courses for Math 100 and Math 112 to support student success in those math courses.

Based on the five-year data collected, students in MTH 100 continue to struggle with solving quadratic equations and our MTH 112 students continue to struggle with solving logarithmic and exponential equations. Our overall mastery in MTH 100 each year has been consistent ranging from 52.4% to 63.6%. Our overall mastery in MTH 112 ranged from 60.7% to 73.8%.

For the Fall 2023 – Spring 2028 cycle, the Math Department decided to create a new unit plan for MTH 100 by adding two additional questions to focus on improving those skills. The MTH 112 unit plan will continue as previously assessed.

Student Learning Outcome 3: Math

Students will perform mathematical computations and apply mathematical principles and methodologies to be successful in their specific degree programs. The mathematical skills are assessed in MTH 100 Intermediate College Algebra and MTH 112 Precalculus Algebra.

NOTE: Beginning Fall 2019, new math placement guidelines with the co-requisites MTH 099 and MTH 111 were implemented (see Appendix B for placement guidelines).

Math 100:

Students will be able to solve quadratic equations. This Student Learning Outcome (SLO) will focus on Q1 - solving a quadratic equation by using the square root property, Q2 – solving a quadratic equation by factoring, Q3 – solving a quadratic equation with rational roots, Q4 – solving a quadratic equation with irrational roots, and Q5 – solving a quadratic equation with imaginary roots. Five common SLO questions will be included on the departmental comprehensive final exam. The math department's goal is 75% of the students taking the final exam will answer three out of five questions correctly.

Assessment Results:

The mid-year review was completed, and no changes were made. The end-of-year review was completed, and the following results were found for each SLO question in Table 3. The table represents the percentage of students that answered three out of five questions correctly on the final exam.

Table 3: MTH 100 SLO Question Mastery

SLO Question	Fall Semester	Spring Semester	Academic Year Totals
Question 1	33.3%	56.1%	42.8%
Question 2	59.1%	56.1%	57.9%
Question 3	46.2%	59.1%	51.6%
Question 4	57%	60.6%	58.5%
Question 5	41.9%	54.5%	47.2%

Table 4 reflects the percent of overall mastery for fall, spring, and the academic year for MTH 100.

Table 4: MTH 100 Mastery

Academic Year	Fall Semester	Spring Semester	Academic Year Totals
2023-24	49.5%	57.6%	52.8%
2024-25			
2025-26			
2026-27			
2027-28			

Analysis of Results: Our students continue to struggle with solving quadratic equations. Questions 1 and 2 are new for this cycle. Questions 3 and 5 decreased in mastery and Question 4 was about the same as the previous year. Students have trouble with solving quadratic equations because of the complexity of the quadratic formula and algebraic manipulations.

Action Taken for Improvement: Instructors will continue to spend extra class time on this material and address the challenges involved with these skills. Extra practice sheets will be available for students needing remediation to help reinforce algebraic skills. Students will be referred to our Tutoring Center for additional help and to SENSE for success coaching. The scope and sequence of the course objectives will be evaluated in the fall semester to determine if realigning topics will prepare students to master the topic. MyLab Math will continue being used for homework assignments to include videos and other instructional material online. The MTH 099 co-requisite course will be offered to support students who meet the math placement guidelines.

Math 112:

Students will be able to apply concepts of exponential and logarithmic functions. This Student Learning Outcome (SLO) will focus on Q1 - solving an exponential equation using the one-to-one property, Q2 – solving a basic exponential equation, Q3 – solving a basic exponential equation with a base of e , Q4 – solving a basic logarithmic equation, and Q5 – solving a logarithmic equation requiring the product property of logarithms. Five common SLO questions will be

included on the comprehensive final exam. The math department’s goal is 75% of the students taking the final exam will answer three out of five questions correctly.

Assessment Results: The mid-year review was completed, and no changes were made. The end-of-year review was completed, and the following results were found for each SLO question in Table 5. The table represents the percentage of students that answered three out of five questions correctly on the final exam.

Table 5: MTH 112 SLO Question Mastery

SLO Question	Fall Semester	Spring Semester	Academic Year Totals
Question 1	66.1%	59.6%	62%
Question 2	71.2%	56.7%	62%
Question 3	66.1%	54.8%	58.9%
Question 4	79.7%	70.2%	73.6%
Question 5	30.5%	34.6%	33.1%

Table 6 reflects the percent of overall mastery for fall, spring, and the academic year for MTH 112.

Table 6: MTH 112 Mastery

Academic Year	Fall Semester	Spring Semester	Academic Year Totals
2023-24	67.8%	58.7%	62%
2024-25			
2025-26			
2026-27			
2027-28			

Analysis of Results: There was a slight increase in the overall mastery from the previous year. Students continue to struggle with solving logarithmic and exponential equations. Question 5 continues to be our lowest mastery of 33.1%. This question requires solving a quadratic equation by factoring or the quadratic formula, both skills originally learned in a previous math course (MTH 100). Students have trouble solving a more complex problem that requires previously learned skills.

Action Taken for Improvement: Instructors will continue to spend extra class time on this material and address the challenges involved with these skills and pre-requisite skills. Extra practice sheets will be available for students needing remediation to help reinforce algebraic skills. Students will be referred to our Tutoring Center for additional help and to SENSE for success coaching. MyLab Math will be used for homework assignments to include videos and other instructional material online. The MTH 111 co-requisite course will be offered to support students who meet the math placement guidelines.

Students will demonstrate knowledge of basic computer skills through the use of current computer technology and applications to develop computer literacy for academic setting and lifelong learning. The SLO is assessed in CIS146.

Table 5 shows the overall breakdown of application results in the course through 2022. Students were measured on the overall success of the course over a 4-year period. Students on average were able to pass the exams with a “C” or better. A new SLO would be assigned to the CIS146 Computer Applications course for the 22/23 academic year.

Table 5.

Academic Year	Word	Excel	PowerPoint	Overall
2018-2019	78%	68%	77%	66%
2019-2020	75%	70%	76%	67%
2020-2021	72%	68%	84%	76%
2021-2022	84%	93%	89%	79%

Assessment: Beginning the 22/23 – academic year - Student completed labs, custom exams, and TestOut certification exam and demonstrated the skills for managing Microsoft Word, Excel, and PowerPoint. The average pass rates for students who completed the course with a B or above is 51% for Summer 2022, 41% for Fall 2022, and 52% for Spring 2023.

Table 6.

Academic Year	Fall	Spring	Summer	Overall Pass rate of a “B” or Higher
2022-2023	41%	52%	51%	48%
2023-2024	53%	52%	In Progress	

Student Learning Outcome 4: Technology

Students will demonstrate knowledge of basic computer skills through the use of current computer technology and applications to develop computer literacy for academic setting and lifelong learning. The SLO is assessed in CIS146.

Assessment Results: Student completed labs, custom exams, and TestOut certification exam and demonstrated the skills for managing Microsoft Word, Excel, and PowerPoint. The average pass rates for students who completed the course with a B or above is 51% for Summer 2022, 41% for Fall 2022, and 52% for Spring 2023.

Academic Year	Fall	Spring	Summer	Overall Pass rate of a "B" or Higher
2023-2024	53%	52%	In Progress	

Use of Results: In Progress - The 23/24 academic year results are still in progress.

Action Taken for Improvement: In Progress - The 23/24 academic year results are still in progress.

Summary of the 2018-2023 Cycle - Science

The general education student learning outcome (SLO) states that "Students will demonstrate scientific literacy through factual knowledge, understanding theoretical concepts, and fundamental principles in natural sciences and the application of scientific principles and methodologies to solve scientific problems". The SLO assesses scientific knowledge in three courses: Chemistry 111, Biology 103, and Physical Science 111. All science courses are the first course in a science sequence. The general education science requirement is eight credit hours in a science laboratory course.

Chemistry 111:

During the 2018-2023 planning cycle, the chemistry faculty established a 70% benchmark for mastery of the chemistry SLO. In 2021-2022, only 60% of students successfully passed the standard stoichiometry question on the Cumulative Final Exam. Therefore, the expected outcome was not met. According to the results, stoichiometry remained a challenging concept for Chemistry 111 students. This suggested that additional instruction is needed to reinforce the concept throughout the course. The action taken for improvement was that Stoichiometry problems would be assigned in all four major units of Chemistry 111. In addition, frequent assessments including weekly quizzes would be utilized to monitor comprehension of stoichiometry throughout all units of the course.

In 2022-2023, 63% passed the standard stoichiometry question on the cumulative final exam across Fall and Spring semesters in the 2022-2023 Academic Year. According to results, stoichiometry remained a challenging concept for CHM111 students, but improvement was observed from Fall to Spring. This suggested that instructional improvements are working, but additional instruction is needed to reinforce the concept throughout the course. Stoichiometry problems were assigned in all four major units of Chemistry 111. Frequent assessment was utilized to monitor comprehension of stoichiometry throughout all units of the course.

Biology 103:

The biology faculty established a 70% mastery for the Biology 103 SLO. 2021-2022 data shows 52% of students were able to correctly identify the levels of taxonomy on the Biology 103 final exam. Instructors would continue to discuss levels of taxonomy during teaching of classification and use the taxon names in discussion to help students identify the levels in order. The action taken for Improvement was to add additional classification activities to identify the process used to group organisms into taxon and show how the taxon size changes from domain to species.

In 2022-2023, data shows 51% of students were able to correctly identify the levels of taxonomy on the Biology 103 cumulative final exam. Students were instructed on connections between levels of taxonomy from the domain down to the species level. The order of the levels would be recognized. According to these results, students are not able to recognize the levels of taxonomy in order. This _____

means each of the levels needs to be explored in more detail with multiple examples of organisms classified from Domain down to Species. The action taken for improvement was more time would be spent on the levels of taxonomy and what their importance is for taxonomy and classification.

Physical Science 111:

As of Fall 2023, Physical Science 111 will no longer be taught at CVCC, so the unit plan will not be continued. However, the results will be factored into the creation of unit plans for courses that replace Physical Science 111. The course was removed from the CVCC curriculum and Chemistry 104 added for general education assessment effective 2023-2024. Additionally, the faculty established a 75% benchmark for mastery of the Science SLOs for 2023-2024.

Table 6 shows the results of the general education science courses over the 2018-2023 planning cycle. CHM111 = Chemistry 111. BIO103 = Biology 103. PHS111 = Physical Science 111. Mastery is considered 70% for Table 6.

Table 6

Academic Year	Mastery of CHM111	Mastery of BIO103	Mastery of PHS111
2018-19	50%	54%	80%
2019-20	68%	58%	87%
2020-21	58%	60%	71%
2021-22	60%	52%	33%
2022-23	63%	51%	17%

Student Learning Outcome 5: Science

Students will demonstrate scientific literacy through factual knowledge, understanding theoretical concepts, and fundamental principles in natural sciences and the application of scientific principles and methodologies to solve scientific problems.

The SLO assesses scientific knowledge in three courses: Chemistry 104, Chemistry 111, and Biology 103. All science courses are the first course in a science sequence. The general education science requirement is eight credit hours in a science laboratory course.

Chemistry 104:

Students who complete general education program will be able to apply scientific principles and methodology to solving chemistry problems at 75% accuracy. 75% of students will be able to correctly solve 6 of 8 chemistry problems on the cumulative final exam.

Assessment Results: 21 out of 32 students successfully passed the standard stoichiometry question on the cumulative final exam. 66 % of Chemistry 104 passed the standard stoichiometry question, therefore, the expected outcome was not met.

Use of Results: According to the results, fundamental chemistry problems including stoichiometry problems remain a challenging concept for Chemistry 104 students. More time for problem-solving will be dedicated in the classroom and in online tutorials.

Action Taken for Improvement: Chemistry problems including stoichiometry problems will be assigned in all four major units of Chemistry 104. Frequent assessment will be utilized to monitor comprehension of chemistry problems throughout all units of the course.

Chemistry 111:

Students who complete general education program will be able to apply scientific principles and methodology to solving chemistry problems at 75% accuracy. 75% of students will be able to correctly solve 6 of 8 chemistry problems on the cumulative final exam.

Assessment Results: 11 out of 27 students successfully passed the assessment questions on the cumulative final exam. Only 41% of Chemistry 111 passed the assessment, therefore the expected outcome was not met.

Use of Results: According to results, fundamental chemistry problems remain a challenging concept for Chemistry 111 students. This suggests that more time in the classroom needs to be dedicated to solving chemistry problems.

Action Taken for Improvement: Chemistry problems including stoichiometry problems will be assigned in all four major units of Chemistry 111. Frequent assessment will be utilized to monitor comprehension of chemistry problems throughout all units of the course.

Biology 103:

Students who complete general education program will be able to apply biological principles and methodology to solving biological problems at 75% accuracy. 75% of students will be able to correctly solve 10 of 14 biological problems on the cumulative final exam.

Assessment Results: 101 out of 174 students successfully passed 10 out of 14 questions on the cumulative final exam. Only 58% of Principles of Biology I (Biology 103) students passed the assessment.

Use of Results: According to these results, students are not able to correctly solve fundamental biological problems on the cumulative final exam. recognize the levels of taxonomy in order. This means more time in the lecture portion of the class must be dedicated to solving biological problems.

Action Taken for Improvement: More time will be spent on solving biological problems within the lecture portion of the class. These problems will be designed to teach students to apply theoretical biological principles.

Table 7 shows the percentage of science students learning outcome results with an overall pass rate of 75% or higher.

Table 7

Academic Year	CHM104	CHM111	BIO103
2023-24	66%	41%	58%
2024-25			
2025-26			
2026-27			
2027-28			

Summary of the 2018-2023 Cycle

Writing: Students demonstrated significant improvement in reducing major errors in their writing over the 2018-2023 cycle. The percentage of student essays containing major errors decreased from 70% to 37%. Despite this progress, the presence of major errors remains a consistent challenge, and the elimination of such errors continues to be a key objective.

Speech: There was a substantial enhancement in students' proficiency and mastery of verbal and non-verbal communication since 2020, attributed to the use of consistent rubrics and expanded instructional examples. The goal for the next assessment cycle is to continue this growth by further increasing the level of mastery.

Math: The math curriculum was restructured following the ACCS College Readiness Task Force's recommendation to adopt a co-requisite model, aimed at increasing the number of students entering college-level math. MTH 098 Elementary Algebra was transitioned to a four-credit-hour developmental math course, and co-requisite learning support courses for Math 100 and Math 112 were implemented to support student success. Five-year data revealed that students in MTH 100 struggle with solving quadratic equations, while MTH 112 students have difficulties with logarithmic and exponential equations. Mastery rates in MTH 100 ranged from 52.4% to 63.6%, and in MTH 112, from 60.7% to 73.8%. For the Fall 2023 – Spring 2028 cycle, the Math Department plans to revise the MTH 100-unit plan by adding two additional questions to improve these skills, while the MTH 112-unit plan will remain unchanged.

Technology: Students' knowledge of basic computer skills, assessed in CIS146, showed that they were generally able to pass the exams with a "C" or better over a four-year period. A new Student Learning Outcome (SLO) was assigned to the CIS146 Computer Applications course for the 2022-2023 academic year to further enhance computer literacy for academic and lifelong learning purposes.

Science: The general education Student Learning Outcome (SLO) focused on scientific literacy, assessed through factual knowledge, understanding theoretical concepts, and applying scientific principles to solve problems. This SLO was evaluated in Chemistry 111, Biology 103, and Physical Science 111, with each being the first course in their respective science sequences.

In conclusion, the 2018-2023 cycle showed notable improvements across various disciplines, with specific plans set for further enhancement in the upcoming assessment cycle.

Dean's Summary of 2023-2024 Cycle Implementation

Writing: Building on the significant progress made during the 2018-2023 cycle, where the percentage of student essays containing major errors decreased from 70% to 37%, the 2024-2029 cycle will focus on further reducing these errors. Despite previous improvements, major errors remain a consistent challenge. Therefore, targeted interventions and enhanced support mechanisms will be implemented to help students achieve greater accuracy in their writing.

Speech: Given the substantial enhancement in students' proficiency and mastery of verbal and non-verbal communication since 2020, this cycle aims to continue this upward trajectory. The use of consistent rubrics and expanded instructional examples has proven effective. The goal for the 2023-2028 cycle is to increase the level of mastery further, ensuring students develop advanced communication skills.

Math: Following the restructuring of the math curriculum based on the ACCS College Readiness Task Force's recommendations, the focus will be on addressing the persistent challenges identified in the data. For MTH 100, where students struggle with solving quadratic equations, the unit plan will be revised to include two additional questions to enhance these skills. For MTH 112, which deals with logarithmic and exponential equations, the current unit plan will remain as is unless annual evaluation results yield a need for change. Continued support through co-requisite learning support courses will be essential to maintaining and improving student success rates.

Technology: The assessment of students' basic computer skills in CIS146 showed that, on average, students were able to pass the exams with a "C" or better over a four-year period. To build on this foundation, a new Student Learning Outcome (SLO) was introduced for the 2022-2023 academic year. The 2024-2029 cycle will focus on enhancing computer literacy further, ensuring students are well-equipped for both academic and lifelong learning.

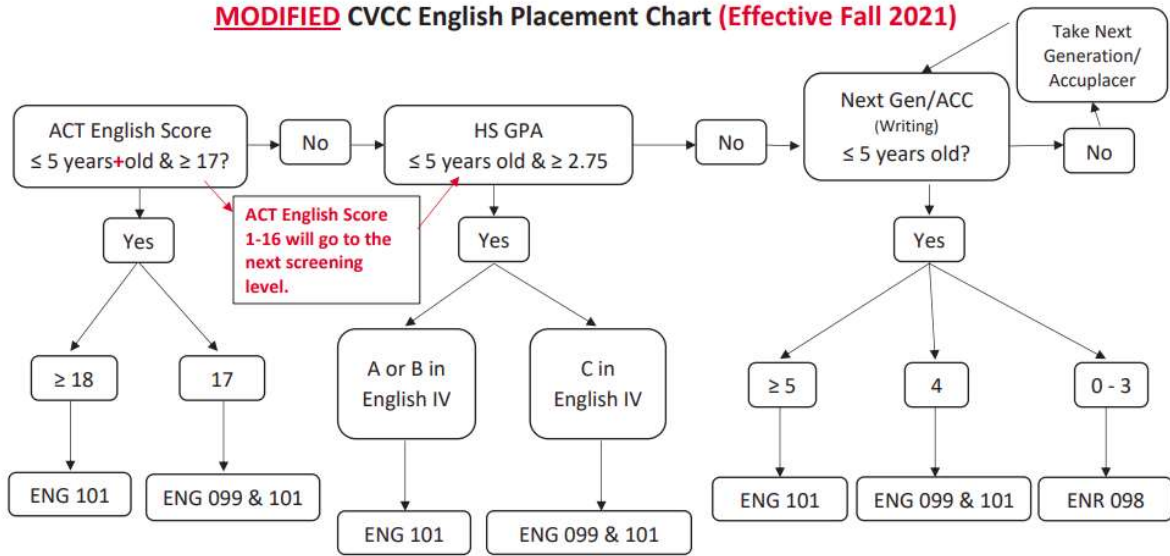
Science: The general education Student Learning Outcome (SLO) for scientific literacy will continue to be assessed through Chemistry 104, Chemistry 111, and Biology 103. These courses are crucial for building a strong foundation in scientific knowledge and methodology. The focus will remain on ensuring students demonstrate a comprehensive understanding of scientific principles and their application to solving scientific problems.

Conclusion: The 2018-2023 cycle showed notable improvements across various disciplines, setting a solid foundation for the 2023-2028 cycle. The implementation of targeted strategies and continuous assessment will be key to further enhancing student learning outcomes. By addressing persistent challenges and building on past successes, we aim to achieve even greater academic excellence and student success in the current cycle.

APPENDIX

Appendix A:
English Placement Guideline

MODIFIED CVCC English Placement Chart (Effective Fall 2021)



Student's Name: _____

Student #: _____

HS GPA (Unweighted): _____

HS English 12 Grade: _____

English placement is: ENG 101, ENG 099 (with ENG101), or ENR 098

Determined using: ACT, HS GPA, Accuplacer, or Next Gen

Placement analyzed by: _____
Signature

_____ Date

Revised 7/01/2021 SCA