## Summary

## CLAS Requirements as of July 1, 2009

Senate Bill 1676 (effective July 1, 2009) eliminated the CLAST as an examination. Given that the bill repeals section 1008.29, F.S., the statutory authority for current rules relating to CLAST exemptions and competencies no longer exists. This means that the State Board of Education Rules that outline ACC approved CLAST exemptions and competencies will be repealed as well.

Therefore, the ACC is being asked to make a recommendation to the State Board of Education and the Board of Governors relating to the two requirements now listed in s. 1007.25, F.S. Specifically, the bill states that an associate in arts or baccalaureate degree may not be conferred upon any student who fails to successfully complete one of the following requirements:

1) Achieve a score that meets or exceeds a minimum score on a nationally standardized examination, as established by the State Board of Education in conjunction with the Board of Governors; or
2) Demonstrate successful remediation of any academic deficiencies and achieve a cumulative GPA of 2.5 or above, on a 4.0 scale, in postsecondary-level coursework identified by the State Board of Education in conjunction with the Board of Governors. The Department of Education shall specify the means by which a student may demonstrate successful remediation.

Previously, these requirements were considered to be ways in which a student would be "exempt" from taking the examination (CLAST). However, since there is no longer an examination to be "exempt" from, these are now de facto requirements for receipt of the AA degree and progression into the upper division of a baccalaureate program. From here on, the requirements will be referred to as College-Level Academic Skills or CLAS.

Senate Bill 1676 borrowed language from Chapter 6A-10.0311, F.A.C., which provided assessment scores and coursework expectations that could exempt students from the testing requirement. However, the bill did not include the same level of specificity as the rule and simply directed the State Board of Education, in conjunction with the Board of Governors, to establish standardized assessment scores and identify the postsecondary-level coursework that can be utilized to meet the requirement.

Given that the provisions of the existing rule were initially intended to be used as exemptions, rather than requirements, there is a need to ensure that the State Board of Education and the Board of Governors reconsider the previous rule language and adopt a clear policy relating to the new statutory requirements. Recommendations from the ACC will be forwarded to the SBE and BOG for consideration upon completion of the August 13, 2009 ACC conference call. These recommendations will be considered short-term until long-range CLAS policies are implemented.

Below is the existing rule language from Chapter 6A-10.0311, F.A.C., relating to assessment and coursework exemptions:
(14) Pursuant to Section 1008.29(9)(a), Florida Statutes, any student fulfilling one or more of the following requirements before completion of the associate in arts degree requirements or baccalaureate degree requirements is exempt from the testing requirements of this rule:
(a) Students may present scores from the Scholastic Achievement Test (SAT-I) as follows:

1. Quantitative. Students who have earned a quantitative score of five hundred (500) or above on the recentered score scale of the Scholastic Achievement Test (SAT-I), or its equivalent on the original score scale, shall be exempt from the computation section of the College-Level Academic Skills Test.
2. Verbal. Students who have earned a verbal score of five hundred (500) or above on the recentered score scale of the Scholastic Achievement Test (SAT-I), or its equivalent on the original score scale, shall be exempt from the Reading, English Language Skills, and Essay sections of the College-Level Academic Skills Test.
(b) Students may present scores from the American College Testing Program (ACT) as follows:
3. Mathematics. Students who have earned a score of twenty-one (21) or above on the Enhanced American College Testing Program in mathematics, or a score of twenty-one (21) or above on the original ACT, shall be exempt from the Computation section of the College-Level Academic Skills Test.
4. English. Students who have earned a score of twenty-two (22) or above on the Enhanced American College Testing Program in Reading, or a score of twenty (20) or above on the Composite of the original ACT, shall be exempt from the Reading section of the College-Level Academic Skills Test. Students who have earned a score of twenty-one (21) or above on the American College Testing Program in English, or a score of twenty (20) or above on the original ACT, shall be exempt from the English Language Skills and Essay sections of the College-Level Academic Skills Test.
(c) Students who have earned a grade point average of 2.5 or above on a 4.0 grade scale in selected postsecondary level courses shall be exempted from one or more sections of the College-Level Academic Skills Test, as specified below. Each postsecondary institution shall establish its own policies for the evaluation of students' coursework when that student earned credits from an institution other than a Florida public community college or university.
5. To exempt the English Language Skills, Reading and Essay sections of the College-Level Academic Skills Test, the student must have earned a 2.5 grade point average in two (2) courses for a minimum of six (6) semester hours of credit from: ENC 1101, English I and ENC 1102, English II or other equivalent college-level English course.
6. To exempt the Computation section of the College-Level Academic Skills Test, the student must have earned a 2.5 grade point average in two (2) courses for a minimum of six (6) semester hours of credit from:
a. Option 1. The student shall complete any two (2) of the following: MAC*102 College Algebra or any other MAC course with the last three digits being higher than 102; MGF*106 Liberal Arts Mathematics I, MGF*107 Liberal Arts Mathematics II, MGF*202 Finite Mathematics or any other MGF courses with the last three digits being higher than 202; or STA*014 Statistical Methods or any other STA course.
b. Option 2. The student shall complete any two (2) of the following: MGF*106 Liberal Arts Mathematics I and MGF*107 Liberal Arts Mathematics II; MGF*113 Topics in College Mathematics I; MGF*114 Topics in College Mathematics II; or MGF*118 Mathematics CLAST Review.
c. Option 3. MGF*106 Liberal Arts Mathematics I or MGF*113 Topics in College Mathematics I, and MAC*102 College Algebra or MAC*105 College Algebra.
(15) Students who do not initially earn passing scores on the Scholastic Achievement Test (SAT-I) or the American College Testing Program may submit scores earned on other administrations of the tests as long as subsequent scores are not earned within thirty (30) days of the preceding score.
(16) Pursuant to Section 1008.29(9), Florida Statutes, any student denied a degree based on the failure of at least one (1) subtest of the CLAST may use any of the alternatives specified in this rule for receipt of a degree if such student meets all degree program requirements at the time of application for the degree under the exemption provisions of this rule. This provision does not require a student to take the CLAST before being given the opportunity to use any of the alternatives specified in this rule. The exemptions provided herein do not apply to requirements for teacher certification as provided in Section 1012.56, Florida Statutes.
(17) For purposes of evaluating student grade point averages to implement the provisions of subsection (14) of this rule, each postsecondary institution may determine how to make allowances for students who have earned credits in Advanced Placement, College-Level Examination, and International Baccalaureate Programs.

## Assessment Options

Current Rule lists only ACT and SAT as potential assessment options for CLAST exemptions. However, there are other standardized examinations that could be considered now that the "exemptions" have become "requirements" for demonstrating proficiency. The chart below provides existing standardized assessments, current policy, and proposals for new policy.
$\left.\begin{array}{|c|c|c|}\hline \text { Assessment } & \text { Current Policy } & \text { Proposed Recommendation } \\ \hline \text { SAT-I Math } & \begin{array}{c}\text { 500 or above - recentered } \\ \text { (Rule 6A-10.0311) }\end{array} & \mathbf{5 0 0} \text { or above } \\ \hline \text { SAT-I Verbal } & \begin{array}{c}\text { (Rule 6A-10.0311) }\end{array} & \mathbf{5 0 0} \text { or above } \\ \hline \text { SAT Writing } & \text { No current policy } & \mathbf{5 0 0} \text { or above } \\ \hline \text { Enhanced ACT Math } & 21 \text { or above / 21 orig. version } \\ \text { (Rule 6A-10.0311) }\end{array}\right)$

Policy Question \#1: Are the recommended assessments and cut scores appropriate for CLAS purposes?

Policy Question \#2: Are there additional assessments appropriate for meeting CLAS requirements? If so, should they be included in the proposal or should the institution be allowed discretion?

## English Language Skills, Reading and Essay (Coursework)

In addition to the identification of standardized assessments and scores, the bill directs the State Board of Education, in conjunction with the Board of Governors, to identify postsecondary-level coursework for which a student must achieve a 2.5. GPA.

Rule 6A-10.0311 (exisiting language): To exempt the English Language Skills, Reading and Essay sections of the College-Level Academic Skills Test, the student must have earned a 2.5 grade point average in two (2) courses for a minimum of six (6) semester hours of credit from: ENC 1101, English I and ENC 1102, English II or other equivalent college-level English course.

As identified in Chapter 6A-10.0316, F.A.C., college-level communication skills include:

1. English Language Skills - grammar, sentence structure, word choice
2. Essay - develop coherent essay
3. Reading - comprehension

Therefore, according to current practice, a course that is identified as a "CLAS course" should be one that includes reading content and requires the creation of a coherent essay using standard English. Rather than identify each potential course individually, SCNS prefixes were identified from which acceptable courses can be drawn.

Proposed SCNS prefixes for "other equivalent college-level English courses"

| AML | American Literature |  |
| :--- | :--- | :--- |
| ENC | English Composition |  |
| ENL | English Literature |  |
| LIT | Literature | Includes writing about film |
| ENG | English General | Producing creative works <br> rather than essay |
| CRW | Creative Writing |  |

* Should not include 0-level or courses numbered in the 900s of any approved prefix (i.e. remedial, independent study \& special topics courses)

Policy Question \#3: In keeping with the CLAS skills outlined in 1(g) and 1(h) of 6A-10.0316, F.A.C., (refer to Appendix C) should speech communication courses also be included?

- SPC X017 - Fundamentals of Speech
- SPC X608 - Public Speaking

Policy Question \#4: Should the acceptable communication coursework be limited/expanded to all Gordon Rule Communication Courses?

Policy Question \#5: Is two (2) courses still the appropriate number for earning the required GPA?

## Mathematics (Coursework)

Rule 6A-10.0311 (existing language):
To exempt the Computation section of the College-Level Academic Skills Test, the student must have earned a 2.5 grade point average in two (2) courses for a minimum of six (6) semester hours of credit from:

- Option 1. The student shall complete any two (2) of the following: MAC*102 College Algebra or any other MAC course with the last three digits being higher than 102; MGF*106 Liberal Arts Mathematics I, MGF*107 Liberal Arts Mathematics II, MGF*202 Finite Mathematics or any other MGF courses with the last three digits being higher than 202; or STA*014 Statistical Methods or any other STA course.
- Option 2. The student shall complete any two (2) of the following: MGF*106 Liberal Arts Mathematics I and MGF*107 Liberal Arts Mathematics II; MGF*113 Topics in College Mathematics I; MGF*114 Topics in College Mathematics II; or MGF*118 Mathematics CLAST Review.
- Option 3. MGF*106 Liberal Arts Mathematics I or MGF*113 Topics in College Mathematics I, and MAC*102 College Algebra or MAC*105 College Algebra.

According to Chapter 6A-10.0316, F.A.C., college-level computation skills include demonstration of mastery of the following algorithms and concepts:

1. arithmetic
2. geometric and measurement
3. algebraic
4. statistical
5. logical-reasoning

Proposed SCNS Mathematics Courses

| Any MAC course w/ last 3 digits of 102 or higher |
| :--- |
| MGF X106 - Liberal Arts Mathematics I |
| MGF X107 - Liberal Arts Mathematics II |
| MGF X113 - Topics in College Mathematics I |
| MGF X114 - Topics in College Mathematics II |
| MGF X118 - Mathematics for CLAST Review |
| Any MGF course w/ last 3 digits of 202 or higher |
| Any STA course |
| Any math course that has College Algebra (MAC 1105) as a prerequisite |
| © Does not include 0-level or courses numbered in the 900s of any approved prefix (i.e. remedial, <br> independent study \& special topics courses) <br> ** MAT 1033 also not included |

Policy Question \#6: Is it necessary to include the specific combinations of courses previously outlined in the rule (i.e. 3 options - almost all possible combinations are covered) or can the recommendation be "any combination of 2 approved mathematics courses" (all of which are currently listed as Gordon Rule)?

## Credit-By-Examination

With regard to the evaluation of GPAs, existing Rule (6A-10.0311, F.A.C.) includes language permitting institutions to make allowances for students who have earned credits in AP, CLEP, and IB programs. Since the inception of this rule, additional credit-by-examination equivalencies (AICE and DSST) have been approved by the ACC, SBE and BOG. The following chart lists the relevant examinations within each program and the SCNS course number to which each examination is equated.

English

| Advanced Placement (AP) | English Language and <br> Composition <br> English Literature and <br> Composition | ENC X101 <br> ENC X102 <br> AML, ENL, or LIT |
| :---: | :---: | :---: |
| International Baccalaureate (IB) | English A1 | ENC X101 |
| Advanced International | Any English Language or <br> Literature Examination <br> Certificate of Education (AICE) | ENC X101 <br>  <br> (A-Level or ASLevel) |
| College-Level Examination | English Composition w/ Essay |  |
| Program (CLEP) | English Literature | ENC X100 |
| DSST | Principles of Public Speaking | ENL X000 |
| Technical Writing | SPC X600 |  |

## Mathematics

| Advanced Placement (AP) | Calculus AB <br> Calculus BC <br> Statistics | MAC X311 |
| :---: | :---: | :---: |
| International Baccalaureate (IB) | Math Methods |  |
|  | Mathematics |  |
| Further Mathematics (Advanced | Mathematics) | MAC X105 |
| MAC X147 |  |  |
| Advanced International | Mathematics (AS-Level) | MHF X202* |
| Certificate of Education (AICE) | Mathematics (A-Level) | MAC X311 + other |
| College-Level Examination | Calculus | MAC X233 |
| Program (CLEP) | Precalculus | MAC X140 |
|  | Algebra, College | MAC X105 |
|  | Trigonometry | MAC X147 |
|  | Algebra-Trig., College | MAC X114 |
|  | Mathematics, College | MGF X106 or MGF X107 |
| DSST | Principles of Statistics | STA X014 |

Policy Question \#7: If the student earns credit for two courses within the same subject area via approved credit by examination, is the CLAS requirement met?

Policy Question \#8: For purposes of meeting CLAS requirement, if a student must combine a course grade with credit earned via approved credit-by-examination, should passing scores be treated as a grade of "B" or "C" for purposes of meeting CLAS requirements? Or, should the passing of the examination meet the course requirement but not be factored into the GPA, meaning the GPA will be based solely on the course taken?

## Transcript Coding (STRES/FASTER)

## Current FASTER Transcript CLAST Codes:

999 Waiver
998 Course Exemption
997 SAT
996 ACT
995 "9B" exemption (created for CPT, but never used)
There is a need to determine whether the additional assessments that may be recommended by the ACC (if approved by the SBE and BOG) should be given a new transcript code or be lumped under the existing "999 - Waiver" code. Given that a student who uses an approved assessment to demonstrate proficiency on a standardized examination would be considered to have "met the requirement," it may be inappropriate to use a waiver code (which would include a statement that the student did NOT meet the requirements).

Policy Question \#9: Should the " 995 " code be used to signify that the requirement has been met by means of demonstrated proficiency on "other assessments" (including CPT, GKT, or other approved assessments)?

Policy Question \#10: Is there value in continuing to differentiate between SAT, ACT, and other assessments? Would it be simpler to lump all assessments under one " 995 " code (or would this result in unintended consequences - i.e. need for recoding or loss of historical data)?

Senate Bill 1676 also included a transcript requirement for any student who is granted a waiver from the CLAS requirements (language taken from repealed s. 1008.29, F.S.). Specifically, the bill states that "If a waiver is approved, the student's transcript shall include a statement that the student did not meet the requirements of this subsection and that a waiver was granted."

Policy Question \#11: What was previously recorded on the transcript when a student received a waiver? Should this "statement" be uniform throughout the state? Are there legal considerations for students with disabilities?

Policy Question \#12: What is the purpose of this statement? Information to upper division institution, employers? Does it negatively impact students?

## Waiver Policies

The bill includes a provision that each institution will establish a committee to consider requests for waivers. It specifically states that "Any student who has taken the authorized examinations and has not achieved a passing score, but has otherwise demonstrated proficiency in the same subject area, may request a waiver from the examination requirement.

Policy Question \#13: Should the ACC develop basic Guidelines for granting waivers or should it be completely an institutional decision?

Policy Question \#14 Is the waiver process different for different types of disabilities? What if a student was granted a course substitution for a documented disability? What if the documented disability is not a learning disability?

## APPENDIX A

## CLAST Bill Language ENROLLED - 2009 Legislature CS for CS for SB 1676, 2nd Engrossed

Section 20. Subsection (12) is added to section 1007.25, Florida Statutes, to read: 1007.25 General education courses; common prerequisites; and other degree requirements.-
(12)(a) A public postsecondary educational institution may not confer an associate in arts or baccalaureate degree upon any student who fails to successfully complete one of the following requirements:

1. Achieve a score that meets or exceeds a minimum score on a nationally standardized examination, as established by the State Board of Education in conjunction with the Board of Governors; or
2. Demonstrate successful remediation of any academic deficiencies and achieve a cumulative grade point average of 2.5 or above, on a 4.0 scale, in postsecondary-level coursework identified by the State Board of Education in conjunction with the Board of Governors. The Department of Education shall specify the means by which a student may demonstrate successful remediation.
(b) Any student who, in the best professional opinion of the postsecondary educational institution, has a specific learning disability such that the student cannot demonstrate successful mastery of one or more of the authorized examinations but is achieving at the college level in every area despite his or her disability, and whose diagnosis indicates that further remediation will not succeed in overcoming the disability, may appeal through the appropriate dean to a committee appointed by the president or the chief academic officer for special consideration. The committee shall examine the evidence of the student's academic and medical records and may hear testimony relevant to the case. The committee may grant a waiver for one or more of the authorized examinations based on the results of its review.
(c) Each public postsecondary educational institution president shall establish a committee to consider requests for waivers from the requirements in paragraph (a). The committee shall be chaired by the chief academic officer of the institution and shall have four additional members appointed by the president as follows:
3. One faculty member from the mathematics department;
4. One faculty member from the English department;
5. The institutional test administrator; and
6. One faculty member from a department other than English or mathematics.
(d) Any student who has taken the authorized examinations and has not achieved a passing score, but has otherwise demonstrated proficiency in coursework in the same subject area, may request a waiver from the examination requirement. Waivers shall be considered only after students have been provided test accommodations or other administrative adjustments to permit the accurate measurement of the student's proficiency in the subject areas measured by the authorized examinations. The committee shall consider the student's educational records and other evidence as to whether the student should be able to pass the authorized examinations. A waiver may be recommended to the president upon a majority vote of the committee. The president may approve or disapprove the recommendation. The president may not approve a request that the committee has disapproved. If a waiver is approved, the student's transcript shall include a statement that the student did not meet the requirements of this subsection and that a waiver was granted.

Section 21. Section 1008.29, Florida Statutes, is repealed.

## APPENDIX B

## Section 1008.29, Florida Statutes (REPEALED)

### 1008.29 College-level communication and mathematics skills examination (CLAST).--

(1) It is the intent of the Legislature that the examination of college-level communication and mathematics skills serve as a mechanism for students to demonstrate that they have mastered the academic competencies prerequisite to upper-division undergraduate instruction. It is further intended that the examination serve as both a summative evaluation instrument prior to student enrollment in upper-division programs and as a source of information for student advisers. It is not intended that student passage of the examination supplant the need for a student to complete the general education curriculum prescribed by an institution.
(2) Public postsecondary educational institutions shall administer a minimum of two administrations, one of which may consist of an alternative administration, of the college-level communication and computation skills examination per academic term. Such administrations shall be available to all lower-division students seeking associate in arts or baccalaureate degrees upon completion of at least 18 semester hours or the equivalent. Public postsecondary educational institutions shall report at a minimum the examination scores of all students tested at each administration of the college-level communication and computation skills examination.
(3) No public postsecondary educational institution shall confer an associate in arts or baccalaureate degree upon any student who fails to complete successfully the examination of college-level communication and computation skills. Students who received their associate in arts degree prior to September 1, 1982, shall be exempt from the provisions of this subsection.
(4) The State Board of Education, in conjunction with the Board of Governors, shall set the minimum scores that constitute successful completion of the examination. In establishing the minimum scores that constitute successful completion of the examination, the boards shall consider any possible negative impact of the tests on minority students. Determinations regarding a student's successful completion of the examination shall be based on the minimum standards for the date the student initially takes the examination.
(5) Any student who, in the best professional opinion of the university, has a specific learning disability such that the student can not demonstrate successful completion of one or more sections of the college-level communication and computation skills examination and is achieving at the college level in every area except that of the disability, and whose diagnosis indicates that further remediation will not succeed in overcoming the disability, may appeal through the appropriate dean to a committee appointed by the president or vice president for academic affairs for special consideration. The committee shall examine the evidence of the student's academic and medical records and may hear testimony relevant to the case. The committee may grant a waiver for one or more sections of the college-level communication and computation skills examination based on the results of its review.
(6) Each public postsecondary educational institution president shall establish a committee to consider requests for waivers from the provisions of subsection (3). The committee shall be chaired by the chief academic officer of the institution and shall have four additional members appointed by the president: a member of the mathematics department, a member of the English department, the institutional test administrator, and a fourth faculty member from a department
other than English or mathematics. Any student who has taken a subtest of the examination required by this section at least four times and has not achieved a passing score, but has otherwise demonstrated proficiency in coursework in the same subject area, may request a waiver from that particular subtest. Waivers shall be considered only after students have been provided test accommodations or other administrative adjustments to permit the accurate measurement of the student's proficiency in the subject areas measured by the examination authorized in this section. The committee shall consider the student's educational records and other evidence as to whether the student should be able to pass the subtest under consideration. A waiver may be recommended to the president upon majority vote of the committee. The president may approve or disapprove the recommendation. The president may not approve a request which the committee has disapproved. If a waiver for a given subtest is approved, the student's transcript shall include a statement that the student did not meet the requirements of subsection (3) and that a waiver was granted.
(7) The State Board of Education, by rule, shall establish fees for the administration of the examination to private postsecondary students.
(8)(a) The State Board of Education, by rule, shall establish fees for the administration of the examination by community colleges at times other than regularly scheduled dates to accommodate examinees who are unable to be tested on those dates. The state board shall establish the conditions under which examinees may be admitted to the special administrations.
(b) The Board of Governors may establish fees for the administration of the examination by state universities at times other than regularly scheduled dates to accommodate examinees who are unable to be tested on those dates. The Board of Governors may establish the conditions under which examinees may be admitted to the special administrations.
(9) Any student fulfilling one or both of the following requirements before completion of associate in arts degree requirements or baccalaureate degree requirements is exempt from the testing requirements of this section:
(a) Achieves a score that meets or exceeds a minimum score on a nationally standardized examination, as established by the State Board of Education in conjunction with the Board of Governors; or
(b) Demonstrates successful remediation of any academic deficiencies identified by the college placement test and achieves a cumulative grade point average of 2.5 or above, on a 4.0 scale, in postsecondary-level coursework identified by the State Board of Education in conjunction with the Board of Governors. The Department of Education shall specify the means by which a student may demonstrate successful remediation.

Any student denied a degree prior to January 1, 1996, based on the failure of at least one subtest of the CLAST may use either of the alternatives specified in this subsection for receipt of a degree if such student meets all degree program requirements at the time of application for the degree under the exemption provisions of this subsection. This section does not require a student to take the CLAST before being given the opportunity to use any of the alternatives specified in this subsection. The exemptions provided herein do not apply to requirements for certification as provided in s. 1012.56.

History.--s. 372, ch. 2002-387; s. 50, ch. 2004-41; s. 123, ch. 2007-217.

## APPENDIX C <br> CLAS Skills Rule

## 6A-10.0316 College-Level Communication and Computation Skills Effective August 1, 1992.

The communication and computation skills identified herein, pursuant to Section 1001.02(2)(d), Florida Statutes, are associated with successful performance of students in college programs through the baccalaureate level.
(1) The following skills, by designated category, are defined as college-level communication skills:
(a) Reading with literal comprehension includes all of the following skills:

1. Recognizing main ideas in a given passage.
2. Identifying supporting details.
3. Determining meaning of words on the basis of context.
(b) Reading with critical comprehension includes all of the following skills:
4. Recognizing the author's purpose.
5. Identifying the author's overall organizational pattern.
6. Distinguishing between statement of fact and statement of opinion.
7. Detecting bias.
8. Recognizing author's tone.
9. Recognizing explicit and implicit relationships within sentences.
10. Recognizing explicit and implicit relationships between sentences.
11. Recognizing valid arguments.
12. Drawing logical inferences and conclusions.
(c) Listening with literal comprehension includes all of the following skills:
13. Recognizing main ideas.
14. Identifying supporting details.
15. Recognizing explicit relationships among ideas.
16. Recalling basic ideas, details, or arguments.
(d) Listening with critical comprehension includes all of the following skills:
17. Perceiving the speaker's purpose.
18. Perceiving the speaker's organization of ideas and information.
19. Discriminating between statements of fact and statements of opinion.
20. Distinguishing between emotional and logical arguments.
21. Detecting bias.
22. Recognizing the speaker's attitude.
23. Synthesizing by drawing logical inferences and conclusions.
24. Evaluating objectively.
(e) Composing units of discourse providing ideas and information suitable for purpose and audience includes all of the following skills:
25. Selecting a subject which lends itself to development.
26. Determining the purpose and the audience for writing.
27. Limiting the subject to a topic which can be developed within the requirements of time, purpose, and audience.
28. Formulating a thesis or statement of main idea which focuses the essay.
29. Developing the thesis or main idea statement by all of the following:
a. Providing adequate support which reflects the ability to distinguish between generalized and specific evidence.
b. Arranging the ideas and supporting details in a logical pattern appropriate to the purpose and the focus.
c. Writing unified prose in which all supporting material is relevant to the thesis or main idea statement.
d. Writing coherent prose and providing effective transitional devices which clearly reflect the organizational pattern and the relationships of the parts.
(f) Transmitting ideas and information in effective written language which conforms to the conventions of standard American English includes all of the following skills:
30. Demonstrating effective word choice by all of the following:
a. Using words which convey the denotative and connotative meanings required by context.
b. Avoiding inappropriate use of slang, jargon, cliches, and pretentious expressions.
c. Avoiding wordiness.
31. Employing conventional sentence structure by all of the following:
a. Placing modifiers correctly.
b. Coordinating and subordinating sentence elements according to their relative importance.
c. Using parallel expressions for parallel ideas.
d. Avoiding fragments, comma splices, and fused sentences.
32. Employing effective sentence structure by all of the following:
a. Using a variety of sentence patterns.
b. Avoiding overuse of passive construction.
33. Observing the conventions of standard American English grammar and usage by all of the following:
a. Using standard verb forms.
b. Maintaining agreement between subject and verb, pronoun and antecedent.
c. Using proper case forms.
d. Maintaining a consistent point of view.
e. Using adjectives and adverbs correctly.
f. Avoiding inappropriate shifts in verb tenses.
g. Making logical comparisons.
34. Using standard practice for spelling, punctuation, and capitalization.
35. Revising, editing, and proofreading units of written discourse to assure clarity, consistency, and conformity to the conventions of standard American English.
(g) Speaking involves composing the message, providing ideas and information suitable to topic, purpose, and audience which includes all of the following skills:
36. Determining the purpose of the oral discourse.
37. Choosing a topic and restricting it according to purpose and audience.
38. Fulfilling the purpose by the following:
a. Formulating a thesis or main idea statement.
b. Providing adequate support material.
c. Organizing suitably.
d. Using appropriate words.
e. Using effective transitions.
(h) Speaking involves transmitting the message, using oral delivery skills suitable to the audience and the occasion by all of the following skills:
39. Employing vocal variety in rate, pitch, and intensity.
40. Articulating clearly.
41. Employing the level of American English appropriate to the designated audience.
42. Demonstrating nonverbal behavior which supports the verbal message with eye contact and appropriate posture, gestures, facial expressions, and body movements.
(2) The following skills, by designated category, are defined as college-level computation skills:
(a) Demonstrating mastery of all of the following arithmetic algorithms:
43. Adding, subtracting, multiplying, and dividing rational numbers.
44. Adding, subtracting, multiplying, and dividing rational numbers in decimal form.
45. Calculating percent increase and percent decrease.
46. Solving the sentence a percent of $b$ is $c$, where values for two of the variables are given.
(b) Demonstrating mastery of all of the following geometric and measurement algorithms:
47. Rounding measurements to the nearest given unit of the measuring device used.
48. Calculating distances, areas, and volumes.
(c) Demonstrating mastery of all of the following algebraic algorithms:
49. Adding, subtracting, multiplying, and dividing real numbers.
50. Applying the order-of-operations agreement to computations involving numbers and variables.
51. Using scientific notation in calculations involving very large or very small measurements.
52. Solving linear equations.
53. Solving linear inequalities.
54. Using given formulas to compute results, when geometric measurements are not involved.
55. Finding particular values of a function.
56. Factoring a quadratic expression.
57. Finding the roots of a quadratic equation.
58. Solving a system of two (2) linear equations in two (2) unknowns.
(d) Demonstrating mastery of all of the following statistical algorithms, including some from probability:
59. Identifying information contained in bar, line, and circle graphs.
60. Determining the mean, median, and mode of a set of numbers.
61. Using the fundamental counting principle.
(e) Demonstrating mastery of logical-reasoning algorithms by deducing facts of set inclusion or set non-inclusion from a diagram.
(f) Demonstrating understanding of arithmetic concepts by all of the following skills:
62. Recognizing the meaning of exponents.
63. Recognizing the role of the base number in determining place value in the base-ten numeration system.
64. Identifying equivalent forms of positive rational numbers involving decimals, percents, and fractions.
65. Determining the order relation between real numbers.
66. Identifying a reasonable estimate of a sum, average, or product of numbers.
(g) Demonstrating understanding of geometric and measurement concepts by all of the following skills:
67. Identifying relationships between angle measures.
68. Classifying simple plane figures by recognizing their properties.
69. Recognizing similar triangles and their properties.
70. Identifying appropriate units of measurement for geometric objects.
(h) Demonstrating understanding of algebraic concepts by all of the following skills:
71. Using properties of operations correctly.
72. Determining whether a particular number is among the solutions of a given equation or equality.
73. Recognizing statements and conditions of proportionality and variation.
74. Identifying regions of the coordinate plane which correspond to specified conditions and vice versa.
(i) Demonstrating understanding of statistical concepts including probability by all of the following skills:
75. Recognizing properties and interrelationships among the mean, median, and mode in a variety of distributions.
76. Choosing the most appropriate procedure for selecting an unbiased sample from a target
population.
77. Identifying the probability of a specified outcome in an experiment.
(j) Demonstrating understanding of logical-reasoning concepts by all of the following skills:
78. Identifying statements equivalent to the negations of simple and compound statements.
79. Determining equivalence or non-equivalence of statements.
80. Drawing logical conclusions from data.
81. Recognizing that an argument may not be valid even though its conclusion is true.
(k) Inferring relations between numbers in general by examining particular number pairs.
(I) Generalizing and selecting applicable generalizations in geometry and measurement by both of the following skills:
82. Inferring formulas for measuring geometric figures.
83. Selecting applicable formulas for computing measures of geometric figures.
( m ) Generalizing and selecting applicable generalizations in algebra by using applicable properties to select equivalent equations and inequalities.
(n) Generalization and selecting applicable generalizations in statistics, including probability, by inferring relations and making accurate predictions from studying statistical data.
(o) Generalizing and selecting applicable generalizations in logical reasoning by both of the following skills:
84. Recognizing valid reasoning patterns as illustrated by valid arguments in everyday language.
85. Selecting applicable rules for transforming statements without affecting their meaning.
(p) Demonstrating proficiency for solving problems in the area of arithmetic by the following skills:
86. Solving real-world problems which do not require the use of variables and which do not involve percent.
87. Solving real-world problems which do not require the use of variables and which do require the use of percent.
88. Solving problems that involve the structure and logic of arithmetic.
(q) Demonstrating proficiency for solving problems in the area of geometry and measurement by both of the following skills:
89. Solving real-world problems involving perimeters, areas, or volumes of geometric figures.
90. Solving real-world problems involving the Pythagorean property.
(r) Demonstrating proficiency for solving problems in the area of algebra by both of the following skills:
91. Solving real-world problems involving the use of variables, aside from commonly used geometric formulas.
92. Solving problems that involve the structure and logic of algebra.
(s) Demonstrating proficiency for solving problems in the area of statistics, including probability, for both of the following skills:
93. Interpreting real-world data involving frequency and cumulative frequency tables.
94. Solving real-world problems involving probabilities.
(t) Demonstrating awareness of the ways in which logical reasoning is used to solve problems by drawing logical conclusions when facts warrant them.
(3) The Articulation Coordinating Committee shall file with the Commissioner and the State Board, on or before November 30 of each odd-numbered year, its recommendations for changes, if any, in the above definitions of college-level communication and computation skills.

## APPENDIX D

Links to all existing CLAS(T) Rules

(To be repealed?)

## Chapter 6A-10.0311

Assessment of Student Attainment of College-Level Communication and Computation Skills https://www.flrules.org/gateway/readFile.asp?sid=0\&tid=1070121\&type=1\&file=6A-10.0311.doc

Chapter 6A-10.0312
Minimum Standards of College-Level Communication and Computation Skills
https://www.flrules.org/gateway/readFile.asp?sid=0\&tid=1070218\&type=1\&file=6A-10.0312.doc

Chapter 6A-10.0314
Applications of College-Level Communication and Computation Skills in State Universities and Community Colleges
https://www.flrules.org/gateway/readFile.asp?sid=0\&tid=1070315\&type=1\&file=6A-10.0314.doc

Chapter 6A-10.0316
College-Level Communication and Computation Skills Effective August 1, 1992
https://www.flrules.org/gateway/readFile.asp?sid=0\&tid=1070509\&type=1\&file=6A-10.0316.doc

Chapter 6A-10.0317
Participation in the College-Level Communication and Computation Skills Testing Program by Nonpublic Postsecondary Institutions
https://www.flrules.org/gateway/readFile.asp?sid=0\&tid=1070606\&type=1\&file=6A-10.0317.doc

