

TOPIC: RECOMMEND AUTHORIZATION TO OFFER SUPPLEMENTAL ACADEMIC INSTRUCTION AT UNIVERSITY OF NORTHERN COLORADO

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I. SUMMARY

This consent item recommends authorization for University of Northern Colorado (UNC) to offer Supplemental Academic Instruction.

II. BACKGROUND

Pursuant to §23-1-113(1.5), C.R.S., the commission may authorize a state institution of higher education to provide supplemental academic instruction (SAI) to students with limited academic deficiencies (students who do not score above the minimum cut score on national assessments of college readiness, like ACT) and to receive Colorado Opportunity Fund (COF) stipend payments even though the institution is not authorized to provide basic skills courses.

Table 1 below shows the current cut scores used for placement decisions. Institutions use these scores to determine if a student is ready for college-level, credit-bearing coursework in English (Reading & Writing) and mathematics.

Prior to the legislation and [Commission Policy I, W](#) that made SAI possible, a student admitted into a four-year institution that scored a few points below these cut scores was typically required to enroll in a community college for non-credit-bearing remedial (basic skills) coursework. SAI, however, allows many of these students to stay at their home institution and enroll directly into credit-bearing English and mathematics general education coursework with extra support (SAI), thus enabling them to finish college faster and with fewer obstacles. Furthermore, the credit-bearing English and mathematics courses taught co-requisitely with SAI are required to be gtPathways approved, thus ensuring transferability.

Table 1: College-Ready Assessment Cut Scores

Assessment	English (Reading)	Math
ACT	18	19
SAT	430	460
Accuplacer	80	85

To be authorized to offer SAI, an institution must submit a proposal to the department that includes information about a) the cut score range on national, primary assessments (like ACT and SAT) it will use for placement into SAI; b) what secondary assessment will be used to ensure appropriate placement; c) a process for how the institution will intervene and advise students about appropriate SAI options; d) how the institution will ensure students understand

the requirement to complete credit-bearing English and mathematics general education coursework within their first 30 credit hours; e) the requirement to flag and report each SAI course and student enrolled in SAI in the Student Course Enrollment File in SURDS; f) communication between SAI faculty and credit-bearing course faculty; g) SAI staffing and support, including contact information for the SAI institutional liaison(s) with the department; SAI and co-requisite pathways course content descriptions and syllabi; and h) the institution's plan to assess whether or not its SAI offerings are meeting benchmarks of student success.

Institutions receive preliminary three-year authorization, after which they will be re-evaluated on the success of their implementation of SAI. The department has taken on the responsibility of collecting and analyzing student SAI records. The department will report the outcomes of SAI programs on an annual basis.

III. STAFF ANALYSIS

This proposal is for mathematics SAI only; not English. UNC is requesting authorization to attach SAI to MATH 124: College Algebra. The SAI will be a one-credit-bearing, COF eligible course: MATH 123: Supplemental Algebra. The following is summarized from the institution's proposal:

a) Cut score range on national, primary assessments it will use for placement into SAI:

The ACT (or SAT for out-of-state students) is being used as the primary assessment in mathematics. All students who wish to enroll in MATH 124 and have an ACT mathematics score of 18 or below (or SAT mathematics score of 459 or below) will be considered as having limited academic deficiency and will be given a secondary assessment.

b) Secondary assessment used to ensure appropriate placement.

The math placement assessment, ALEKS PPL, is required of all UNC students before enrolling in College Algebra MATH 124. Based on our analysis of placement and performance data from this past year, students with an ALEKS score less than 40 and greater than 25 will be required to enroll in the co-requisite MATH 123 Supplemental Algebra in order to register for MATH 124. Students with an ALEKS score below 25 will be deemed remedial and directed to developmental math at a community college.

Our plan is to analyze the placement performance data going forward and revise the cut-offs as necessary in the future. We anticipate that a math placement index using multiple indicators, such as ALEKS score and high school GPA, may be used to define limited academic deficiency in the future.

c) Process for how the institution will intervene and advise students about appropriate SAI options:

Incoming students who qualify with “limited academic deficiency” will be informed as they attempt to register for MATH 124 that they are required to co-register for MATH 123: Supplemental Algebra. This notification is made through our registration system and handled by the Registrar in the similar manner as we handle enforcing course prerequisites at UNC. All incoming students that attend New Student Orientation are also required to attend a math placement advising session where information on SAI will also be conveyed by the advisors.

Students enrolled in the SAI course will review foundational skills needed for College Algebra content, participate in activities designed to deepen their understanding of current topics in College Algebra, and be assisted in developing productive strategies for studying the College Algebra content.

d) How will the institution ensure students understand the requirement to complete credit-bearing English and mathematics general education coursework within their first 30 credit hours?

All incoming students that attend New Student Orientation are also required to attend a math placement advising session where they will be informed of the requirement to complete the credit-bearing math course with SAI within the first 30 credits.

e) Requirement to flag and report each SAI course and student enrolled in SAI in the Student Course Enrollment File in SURDS:

University of Northern Colorado affirms it will comply with this requirement when submitting SURDS data.

f) Communication between SAI faculty and credit-bearing course faculty:

The instructors for MATH 124: College Algebra meet at least bi-monthly in course coordination meetings. The instructors for MATH 123: Supplemental Algebra will attend these meetings in order to share information between SAI faculty and college algebra faculty. Faculty teaching SAI will also be involved in the delivery of college algebra and other gateway courses, though in any given semester we don’t anticipate any overlap. Furthermore, results of program assessment of SAI, including data on student outcomes and success in SAI, will be shared with all faculty in mathematical sciences.

g) SAI staffing and support, including contact information for the SAI institutional liaison(s) with the department; SAI and co-requisite gtPathways course content descriptions and syllabi:

The SAI liaison for UNC is Dr. Ann Bentz, Special Assistant to the Provost. The Math SAI liaison is Dr. Dean Allison. The Math SAI program is supported by the School of Mathematical Sciences.

Here is the catalog description for MATH 123: Supplemental Algebra at UNC approved through the usual university curriculum process:

MATH 123 Supplemental Algebra (1 credit)

Co-requisite: MATH 124. Provides supplemental academic support for students enrolled in College Algebra (MATH 124) including content review and study skills. Required course based on the math placement index.

Here is the catalog description for MATH 124 College Algebra at UNC, a course approved for gtPathways:

MATH 124 College Algebra (4 credits)

Prerequisites: A satisfactory score on the math placement index and either two years of high school algebra with a grade of C or better (C- is not acceptable) or the equivalent. Topics covered in this course include linear, quadratic, exponential and logarithmic functions, matrices, theory of equations.

h) Institution's plan to assess whether or not its SAI offerings are meeting benchmarks of student success:

The SAI evaluation plan contains a descriptive and a causal component. The descriptive component involves tracking demographic and academic information about students who are placed into SAI to monitor the characteristics of students taking SAI and their academic outcomes in SAI and the college-level gateway mathematics course. The causal component involves conducting a multi-year quasi-experimental study to determine if SAI is resulting in more students being successful in the gateway mathematics course than would be successful without student participation in SAI. One measure of success is if within three years we find that course grades for SAI students co-registered for MATH 123 and 124 are as good as students enrolled in MATH 124 without SAI (measured as proportion of students with a grade of C or better). Another measure of success we intend to use in the quasi-experimental study is if SAI students perform significantly better than students without SAI.

IV. STAFF RECOMMENDATIONS

Staff recommends the Commission authorize University of Northern Colorado's proposal to offer supplemental academic instruction.

V. STATUTORY AUTHORITY

23-1-113. Commission directive - admission standards for baccalaureate and graduate institutions of higher education - policy – definitions

(1.5) (a) (I) The commission shall establish and the governing boards shall implement a policy pursuant to section 23-1-113.3 to identify matriculated students who need basic skills courses in English and mathematics and standards and procedures whereby state institutions of higher education may offer basic skills courses as provided in section 23-1-113.3. The commission, in consultation with the governing boards, shall ensure that the policy aligns with the admission policy adopted pursuant to subsection (1) of this section. In identifying the standards for basic skills, the commission may differentiate requirements for mathematics based on the prerequisite skills needed for required courses within a student's declared program of study.

(II) As part of the policy established pursuant to this paragraph (a), the commission may authorize a state institution of higher education to provide supplemental academic instruction even though the institution is not authorized to provide basic skills courses pursuant to section 23-1-113.3. The institution may receive stipend payments from the state pursuant to section 23-18-202 on behalf of an eligible undergraduate student, as defined in section 23-18-102 (5), who is enrolled in a college-level course that includes supplemental academic instruction.

(b) Each governing board shall adopt policies and procedures that are aligned with the policy established by the commission pursuant to paragraph (a) of this subsection (1.5) and that ensure that, to the extent required by the commission policy, each matriculated student takes or has taken basic skills placement or assessment tests in English and mathematics. The institution that enrolls the student shall select which tests to use from among those that meet the standards established in the commission policy and shall administer the tests. The commission, in consultation with the governing boards, shall ensure the comparability of the placement or assessment tests for the purpose of providing consistent reporting data as such data are required by section 23-1-113.3 (4).

(c) Students identified by institutions as needing basic skills courses based on their test scores shall complete the appropriate basic skills courses by the time the student completes thirty college-level credit hours. The commission, in consultation with the governing boards, shall ensure that each student identified as needing basic skills courses receives written notification identifying which state institutions offer basic skills courses and the approximate cost and relative availability of the basic skills courses, including any on-line courses.