

Routing #15 80-81

Resolution #13
1980-1981

Resolution #15, 1980-81

Assessing Achievement in
Quantitative Skills

TO: PRESIDENT ALBERT W. BROWN

FROM: THE FACULTY SENATE

Meeting on 2/23/81
(Date)

RE: I. Formal Resolution (Act of Determination)
 II. Recommendation (Urging the fitness of)
 X III. Other (Notice, Request, Report, etc.)

SUBJECT: Assessing Achievement in Quantitative Skills
(See Attached)



Signed Lynn H. Parsons Date Sent 3/10/81
(For the Senate)

Lynn H. Parsons, President, Faculty Senate

TO: THE FACULTY SENATE

FROM: PRESIDENT ALBERT W. BROWN

RE: I. DECISION AND ACTION TAKEN ON FORMAL RESOLUTION

- a. Accepted. Effective Date 4-8-81
- b. Deferred for discussion with the Faculty Senate on _____
- c. Unacceptable for the reasons contained in the attached explanation

- II., III. a. Received and acknowledged
- b. Comment:

DISTRIBUTION: Vice Presidents: Baugher
Others as identified:

Distribution Date: 4-10-81

Signed: Albert W. Brown
(President of the College)

Date Received by the Senate: _____

ASSESSING ACHIEVEMENT IN QUANTITATIVE SKILLS

It is the goal of the Quantitative Skills segment of the General Education Program to ensure that students demonstrate competence in mathematics as soon as possible after beginning a program of study at Brockport. The areas in which students must be competent include the fundamental concepts of arithmetic, algebra, and probability and statistics, as well as applications of these topics to a variety of practical situations. The reasons for requiring this competence include the importance of quantitative skills for a wide variety of programs at the College, the need for such skills after graduation, and the contribution these skills make to the process of abstract thinking.

There are three ways of demonstrating competence in the Quantitative Skills component. Based on an assessment of their previous work, students will be placed in the appropriate track and/or courses.

1. Freshmen with relatively strong high school mathematics backgrounds (including a minimum score of 75⁺ on the Math 11 or Course III New York State Regents examination or a passing grade in Math 12) will be able to satisfy the Quantitative Skills requirement by:
 - a. passing any college level statistics course at Brockport as approved by the General Education Committee, or
 - b. passing the "competency exam" described under (3) below.
2. Students who have, in addition to the above, passed an acceptable probability and statistics course in high school will have satisfied the Quantitative Skills requirement altogether.
3. All other Freshmen must demonstrate competence by passing an examination. Depending on their high-school mathematics records, students will be placed in one or more courses to prepare them to pass this examination generally according to the following plan:
 - a. Students with approximately 2 years of college-preparatory mathematics will be placed in QNT 111: Quantitative Skills, a course that addresses the items covered on the competency examination. Some students in this category depending on their anticipated major, will be allowed to substitute MTH 121: College Algebra and a statistics course for QNT 111 in preparation for the competency examination.
 - b. Students with a weak background in mathematics will in general be placed in QNT 110: Introductory Mathematics, a course that prepares students for QNT 111.

A standardized common final examination will be given in QNT 111. Passing this examination will be accepted as a demonstration of competence and is a requirement for passing the course. A diagnostic pretest, similar to the final competency examination, will be given at the beginning of QNT 111 and will enable students in QNT 111 to challenge the competency examination.

The revised Quantitative Skills Program detailed in the preceding paragraphs differs from the currently-approved program in two respects:

1. Under the revised plan not every freshman would be required to take a competency examination. A satisfactory score on the New York State Math 11 or Course III Regents Examination would be accepted as proof of competence in all areas of quantitative skills except those in probability and statistics.

2. Under the revised plan students will have more latitude in the area of statistics. Under the current plan, the appropriate freshmen are scheduled into the one-credit course QNT 112: Introductory Statistics during the first semester. The proposed plan allows any statistics course and does not require that the statistics course be taken during the first semester.

*This grade level may be changed by the General Education Committee based on an assessment of the placement process.



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