In order to transfer from the Calculus A-B-C sequence (from MATH 171) to the Calculus I-II sequence (to MATH182A), the student must show proficiency in the topics that are included in MATH-181A (Calculus I), but not in MATH-171 (Calculus A):

- Newton’s Method
- Optimization
- Integration:
  - Estimating area
  - Sigma notation and Riemann sums
  - The definite integral
  - Antiderivatives
  - The Fundamental Theorem of Calculus
  - Indefinite integrals
  - The substitution technique of integration
  - The definition of a logarithm in terms of integrals

Students bridge from MATH-171 (Calculus A) to MATH-182A (Calculus II) by taking the Bridge Exam as a Credit by Examination during final’s week of fall semester in December.

**CALCULUS BRIDGE CREDIT BY EXAM:**

The Bridge exam is given during fall semester’s final exam week in December. Professors will send emails toward the end of the semester informing us of your interest in taking the exam and current eligibility. At the end of the semester, after they have graded the final exams they will confirm your grade.

Students sitting for the Calculus Bridge Exam will meet the following criteria:

- Grade level of A or A- in the Calculus A course (for 2161 term)
- Score of 80% or higher on the Calculus common core exam (for 2161 term)

Usually students also have previous exposure to the topics on the exam, such as from a high school course from which they earned no college credit.

The topics for the exam are listed above, and may include other topics covered in MATH-171 (Calculus A). The test will be offered on Thursday or Friday during exam week. Prequalified students will be emailed regarding their availability. The exam will be a free response written exam. It will contain approximately 10 questions and it lasts 90 minutes. A score of at least 80% on the Bridge Exam is required to receive 1 credit for MATH-180 (Calculus Bridge) and move onto MATH 182A.

If you are interested in taking the Bridge Exam, please contact Corinne Teravainen at cxtsma@rit.edu as soon as possible to determine your eligibility and discuss the Credit by Exam process and cost.

If you have any questions regarding the exam content please contact Professor Barth-Hart at dshsma@rit.edu