Guide for Choosing Courses for Math Majors

The mathematics summer advisors can be contacted at mathorientation@math.vt.edu if you have any questions about which courses to choose.

- Calculus (or beyond)
  - If you do not have any calculus transfer credit, you must take the ALEKS placement assessment.
    - If you score 80 or higher, enroll in MATH 1225.
    - If you do not attain a score of 80 or higher in three attempts, enroll in MATH 1214.
  - If you have transfer credit for MATH 1225 only, enroll in MATH 1226
  - If you have transfer credit for both MATH 1225 and 1226 you may either:
    - Enroll in MATH 2405H, which is the first semester of a year-long integrated sequence which covers MATH 2114 (linear algebra), 2204 (multivariable calculus) and 2214 (differential equations), with an eye to applications and algorithmic implementation of solutions.
    - Enroll in MATH 2114 (linear algebra) and MATH 2204 (multivariable calculus), and possibly choose an honors section of one or both.
    - Ask the summer advisors if you have questions about which option is right for you.
  - If you have credit for at least one course beyond MATH 1226, contact the summer advisors.

- Programming
  - If you do not have transfer credit for any programming class or extensive previous programming experience AND you passed the ALEKS placement assessment or have transfer credit for MATH 1225, enroll in MATH 1454 (Intro to Math Programming).
  - If you are unsure about your eligibility for MATH 1454, or have questions about programming placement, contact the summer advisors.

- First-year experience
  - All first-year math majors enroll in MATH 1004 (Discovering Mathematics).
  - If you are a transfer student and are not sure if MATH 1004 is right for you, contact the summer advisors.

- First-year Writing
  - If you have no English transfer credit, and your English placement is ENGL 1105, then register for ENGL 1105.
  - If you have credit for ENGL 1105 only, or if you have no transfer credit but your English placement is ENGL 1106, then register for ENGL 1106.
  - If you have transfer credit for both ENGL 1105 and 1106, you do not need to register for first-year writing.
• Courses for Corps of Cadets, Living Learning Communities, Honors, Marching Band, etc
  ○ If you are enrolled in any of the programs in this heading, you should hear from the program about the necessary courses to enroll in. Contact us if you are not sure what to enroll in.
• Additional courses
  ○ Consult the attached first-year course list to find additional courses that you are interested in. Consider Pathways concepts that you need credit in. Register for at least 14 hours of classes.