# MATHEMATICAL AND COMPUTER SCIENCES DEPARTMENT

# FIRST YEAR STUDENT ADVISING SHEET

MAJOR: Mathematics (Optional Concentrations: Pure Mathematics, Applied Mathematics, Secondary Education)

### COURSES REQUIRED BY THE MAJOR

#### First Semester

- MA 121 *Calculus I* (see note 1a)
- CS 121 Computer Science I
- ED 105 Early Adolescent/Adolescent Development and Learning (for Secondary Education concentrators only)
- MA 130 Creative Problem-Solving I

### **Second Semester**

- MA 122 Calculus II (see note 1b)
- ED 151 Early Adolescent/Adolescent Cognition (for Secondary Education Concentrators only)
- ED 161 *Integrated Technology I* (for Secondary Education concentrators only)

#### NOTES:

- 1. a. A student who achieved a score of 4 or better on the College Board Advanced Placement Calculus AB Examination should be placed in MA 122 *Calculus II* in the first semester and MA 222 *Calculus III* in the second semester. Credit will be given for MA121 *Calculus I*.
  - b. A student who achieved a score of 4 or better on the College Board Advanced Placement Calculus BC Examination should take MA 222 *Calculus III* in the first semester and consider taking MA201 *Linear Algebra* in the second semester. Credit will be given for both Ma 121 and for MA 122.
- 2. PHYS 200 *College Physics I* is required for the Secondary Education concentration, and for these students PHYS 200 will fulfill one of the two courses required for Core in Natural and Physical Sciences. Unless a student has a special interest in PHYS 200, students are advised to wait to take PHYS 200 until after they have completed MA 222 *Calculus III*.
- 3. Actuarial Science is a separate major with a separate advising sheet; consult that sheet for required first year courses for the Actuarial Science major.
- 4. Students considering a Mathematics major (any concentration) should **not** take MA 105 *Mathematics for Liberal Studies* or MA 117 *Concepts of Calculus*.
- 5. All Mathematics majors should take a math course every semester, even if they have AP or transfer credit for one or more calculus courses.
- 6. A C- or better is required to advance from MA 121 to MA 122 and from MA 122 to MA 222.

Students interested in Mathematical Sciences should contact Tim McDevitt, Chair of Mathematical and Computer Sciences (McDevittT@etown.edu, 717-361-1337).