

Mathematics for Future Early Childhood Ed, Elementary, and Middle School Teachers

Reasons for taking MAT*143, *Math for Elementary Education: Algebra, Number Systems* and MAT*144, *Math for Elementary Education: Geometry, Data* at Naugatuck Valley Community College

- 1) **Course content is relevant to the mathematics taught and methods used in grades Pre-K – 6**
 - Methods model those used in early childhood / elementary school classrooms through use of manipulatives (e.g., Cuisenaire rods, base 10 blocks, fraction bars, color counters, etc.) to promote understanding
 - Conceptual understanding, necessary for the teacher to be able to respond to student questions / answers, is emphasized, not simply rote memorization of content
 - Content / methods provide an excellent reexamination of elementary school mathematics for the prospective middle school teacher

- 2) **Materials reflect the Standards**
 - Course material is in line with CCSSM (*Common Core Standards for Mathematics*) and NCTM (National Council of Teachers of Mathematics) recommendations
 - *Common Core State Standards for Mathematics*, and NCTM recommendations, emphasize critical thinking and problem solving, fewer concepts but in more depth and with greater rigor, not rote memorization; course material is in line with the Standards, which expect more academically and intellectually of students, thus of their teachers
 - Course methodology incorporates *Common Core State Standards for Mathematical Practice*

- 3) **Courses provide excellent preparation for *Praxis* Core tests, required for acceptance into education programs**
 - The CT State Board of Education has adopted new *Praxis* tests (*Praxis* Core) for all applicants for certification in elementary and early childhood education, thus Connecticut colleges and universities now use *Praxis* Core to evaluate individuals for entry into teacher education programs

- 4) **Courses transfer to the Connecticut State Universities as well as to many private colleges/universities**
 - For example, MAT*143 transfers as follows: ECSU MAT 139, CCSU MATH 113, SCSU MAT 105, WCSU MAT 105 (this course is 4 credits, so students make up the credit with lab experiences)
 - For example, MAT*144 transfers as follows: ECSU MAT 140, CCSU MATH 213, WCSU MAT 106 (students make up the 4th credit with lab experiences); MAT*144 together with MAT*143 transfer as SCSU 105 & 106

- 5) **Taking MAT*143/144 at Naugatuck Valley is considerably less expensive than taking the equivalent courses at a 4-year institution**
 - Students save substantial time and money by taking courses that satisfy the degree requirement at both NVCC and their chosen 4-year institution