Generating Educational Excellence in Math and Science (GEM)

Generating Educational Excellence in Math and Science (GEM) Courses

GEM 1011. GEEMS Mathematics/Science I. (1-2) 1 Credit Hour.
This course introduces students to the prospect of mathematics and science secondary teaching as a career choice through hands-on experiences observing and teaching in an elementary classroom. Students will work in teams with an exemplary elementary teacher at one of the local school districts participating in mathematics and science classes. Class activities will emphasize the qualities of good mathematics and science teaching, including standards-based instruction and the integration of resources into effective class planning. Field-based experiences required. Restricted course; GEEMS Office approval required for registration. (Formerly UTE 1011. Credit cannot be earned for both GEM 1011 and UTE 1011.).

GEM 1021. GEEMS Mathematics/Science II. (1-2) 1 Credit Hour.
Prerequisite: GEM 1011. Builds on the teaching practices, lesson plan design, and instructional models used in GEM 1011, but in a middle school setting. Students become familiar with the reform movements in the middle school concept and philosophy. Through class activities and observations of middle school mathematics and science teachers, students identify the instructional and management strategies and assessment techniques appropriate to early adolescence. Students work in teams with an exemplary middle school teacher to design and deliver lessons appropriate to middle school students. Field-based experiences required. Restricted course; GEEMS Office approval required for registration. (Formerly UTE 1021. Credit cannot be earned for both GEM 1021 and UTE 1021.).

GEM 1031. GEEMS Mathematics/Science III. (1-2) 1 Credit Hour.
Prerequisite: GEM 1021. Builds on the teaching practices, lesson plan design, and instructional models used in GEM 1021, but in a high school setting. Students become familiar with the reform movements in the high school concept and philosophy. Through class activities and observations of high school mathematics and science teachers, students identify the instructional and management strategies and assessment techniques appropriate to adolescence. Students work in teams with an exemplary high school teacher to design and deliver lessons appropriate to high school students. Field-based experiences required. Restricted course; GEEMS Office approval required for registration. (Formerly UTE 1031. Credit cannot be earned for both GEM 1031 and UTE 1031.).