

EDUC: SCIENCE EDUCATION (EDST)

EDST S601 Physics Content for K-8 Teachers

3 credits (2+2)

Part One of a two-semester sequence examines the fundamental concepts of physical science with focus on physics. Instruction will model appropriate teaching practices for the K-8 classroom. Course utilizes web-based texts, simulations, virtual labs, materials sent by instructor to students in kit form, as well as typical household materials.

Prerequisite: Current elementary teaching certificate.

EDST S602 Chemistry Content for K-8 Teachers

3 credits (2+2)

Part Two of a two-semester sequence examines the fundamental concepts of physical science with focus on chemistry. Instruction will model appropriate teaching practices for the K-8 classroom. Course utilizes web-based texts, simulations, virtual labs; materials sent by instructor to students in kit form, as well as typical household materials.

Prerequisite: EDST S601.

EDST S603 Earth and Space Science Content for K-8 Teachers

3 credits (2+2)

Examines the fundamental concepts of earth and space science. Instruction will model appropriate teaching practices for the K-8 classroom. Course utilizes web-based texts, simulations, and virtual labs; materials sent by to students in kit form, as well as typical household materials.

Prerequisite: EDST S602.

EDST S604 Life Science Content for K-8 Teachers

3 credits (2+2)

Examines the fundamental concepts of life science. Instruction will model appropriate teaching practices for K-8 classroom. Course utilizes web-based texts, simulations, virtual labs, materials sent by instructor to students in kit form, as well as items from the local environment.

Prerequisite: EDST S603.

EDST S605 Great Ideas in Science

3 credits (2+2)

Examines the greatest ideas and notions in science. Instruction will model appropriate teaching practices for the K-8 classroom. Course utilizes web-based texts, simulations, and virtual labs.

Prerequisite: EDST S604.

EDST S675 Selected Topics in STEM

3 credits (2+2)

Affords examination of a selected topic or problem in the STEM fields (Science, Technology, Engineering, and Mathematics). Topics and content will vary as STEM issues are updated. This course will be required for the M.Ed. programs in Mathematics Education, Technology Education, and Science Education.

Prerequisite: Current elementary teaching certificate.

EDST S698 Master's Research Project or Portfolio

1-3 credits (0+0+ 4-12)

A research paper, project, or a professional portfolio, jointly approved by the student's graduate committee and the student; to coincide with the student's professional objectives. The portfolio should document the required knowledge and ability to apply the standards set by the UAS School of Education (SOE). Portfolio criteria should be obtained from the SOE or the graduate advisor. The student's graduate committee may require an oral defense of either option.

Prerequisite: Permission of graduate advisor and instructor required.