

SCIENCE/MATH EDUCATION (SMED)

SMED 501 Designing Instructional Sequences in Secondary Math and Science 3 Hours

Theory and practice of designing and delivering high quality inquiry-based math & science instruction. Students explore and practice the guided inquiry process, create lesson plans, and implement lessons with secondary students. Note: Admission to GSKyTeach program required.

Corequisite(s): SMED 520, SMED 510

Recent Term(s) Offered: None

SMED 510 Advanced Topics in Knowing and Learning in Mathematics and Science 3 Hours

Exploration of essential questions specifically relevant to teaching mathematics and science. Standards for knowing how they are used, how knowing and learning are structured, and how what is known changes and develops. Note: Admission to GSKyTeach program required.

Corequisite(s): SMED 501, SMED 520

Recent Term(s) Offered: None

SMED 520 Management for Positive Learning Environments 3 Hours

Application of learning theories in instructional settings with diverse student populations. Emphasizes proactive, positive classroom management for teaching and learning. Fieldwork required; students are responsible for arranging their own transportation to sites. Note: Admission to GSKyTeach program required.

Corequisite(s): SMED 501, SMED 510

Recent Term(s) Offered: None

SMED 530 Literacy Support for Diverse Learners in Mathematics and Science 3 Hours

Designing literacy instruction for diverse learners in mathematics and science. Note: Successful completion of at least one graduate SMED course required.

Recent Term(s) Offered: None

SMED 560 Developing Professional Learning Communities for Instructional Improvement 3 Hours

Students form secondary professional learning communities with Mentor and Master Teachers and analyze student performance data to improve teaching/learning. Note: Admission to GSKyTeach program required.

Prerequisite(s): permission of instructor

Corequisite(s): SMED 620, SMED 589

Recent Term(s) Offered: None

SMED 589 Science and Mathematics Education Internship Seminar 3 Hours

Connects theory to practice by helping students complete teaching tasks that demonstrate performance related to Kentucky's New Teacher Standards.

Corequisite(s): SMED 590

Recent Term(s) Offered: None

SMED 590 Teaching Internship 8 Hours

Supervised student teaching experience across fall and spring semesters in assigned off-campus site. Students are responsible for their own transportation to off-campus site. Note: Admission to GSKyTeach program, Teacher Education, and student teaching required.

Corequisite(s): SMED 589

Recent Term(s) Offered: None

SMED 620 Collaborative Research to Improve Mathematics and Science Teaching 3 Hours

Development of skills needed to design and develop a data based action research project to be implemented during the semester. Note: Admission to GSKyTeach program required.

Prerequisite(s): permission of instructor

Corequisite(s): SMED 560, SMED 589

Recent Term(s) Offered: None

SMED 630 Action Research Seminar 1 Hour

Students present results of instructional innovation and develop conclusions about practice or process implemented in secondary math or science classroom.

Prerequisite(s): SMED 620

Recent Term(s) Offered: None