

STEM (STEM)

STEM 1--. STEM-UPPER DIVISION. (1-10 Credits)

Upper Level Coursework in STEM

Level: Undergraduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Transfer

Schedule type(s): Lecture

Area(s) of Inquiry: None

STEM 2--. STEM-GRAD ELECT. (1-10 Credits)

Graduate Level Coursework in STEM

Level: Graduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Transfer

Schedule type(s): Lecture

Area(s) of Inquiry: None

STEM 100. INTRODUCTION TO STEM EDUCATION. (3 Credits)

Level: Non Degree Coursework, Professional Health Care, Undergraduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 107. SCI CONTENT & PEDAG ELEM EDU 1. (3 Credits)

This course addressed science content and pedagogy for effective elementary school teaching. Students will explore and investigate natural phenomena and fundamental science ideas as well as explore related elementary student thinking and effective science instructional practices to support elementary student learning of science. Specifically, this course will explore concepts, teaching strategies, and learning related to forces, sound, light, ecosystems, heredity, and astronomy.

Level: Non Degree Coursework, Professional Health Care, Undergraduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture

Area(s) of Inquiry: Life Science, Physical Science, Scientific Literacy

STEM 108. SCI CONTENT & PEDAG ELEM EDU 2. (3 Credits)

This course addressed science content and pedagogy for effective elementary school teaching. Students will explore and investigate natural phenomena and fundamental science ideas as well as explore related elementary student thinking and effective science instructional practices to support elementary student learning of science. Specifically, this course will explore concepts, teaching strategies, and learning related to matter, diversity/distribution of life, erosion, weather, climate, natural selection, gravity, and magnetism.

Level: Non Degree Coursework, Professional Health Care, Undergraduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture

Area(s) of Inquiry: Life Science, Physical Science, Scientific Literacy

STEM 109. SCI CONTENT & PEDAG ELEM EDU 3. (3 Credits)

This course addressed science content and pedagogy for effective elementary school teaching. Students will explore and investigate natural phenomena and fundamental science ideas as well as explore related elementary student thinking and effective science instructional practices to support elementary student learning of science. Specifically, this course will explore concepts, teaching strategies, and learning related to energy transfer, structure and function relationships, earth processes, cycling of matter, and the universe.

Level: Non Degree Coursework, Professional Health Care, Undergraduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture

Area(s) of Inquiry: Life Science, Physical Science, Scientific Literacy

STEM 110. INTEGRATED SCIENCE I. (3 Credits)

This course will help teachers gain greater understanding of physical, earth, and life science concepts necessary for implementation of the Next Generation Science Standards. Specifically, the course will explore: motion and forces, energy, matter, Earth systems, Earth and human activity, Earth's place in the universe, organisms, structure and function, heredity, ecosystems, and diversity of life. NOTE: GRAD STUDENTS WHO WANT TO TAKE THIS COURSE FOR GRADUATE CREDIT SHOULD CONTACT THE INSTRUCTOR.

Level: Non Degree Coursework, Professional Health Care, Undergraduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: Life Science, Physical Science, Scientific Literacy

STEM 111. INTEGRATED SCIENCE II. (3 Credits)

This course will help teachers gain greater understanding of physical, earth, and life science concepts necessary for implementation of the Next Generation Science Standards. Specifically, this course will explore: laws of physics, theories about matter, waves, our solar system, Earth cycles, Earth and human activity, biotic and abiotic factors in ecosystems, natural selection, genetics, and cell theory.

Level: Non Degree Coursework, Professional Health Care, Undergraduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: Life Science, Physical Science, Scientific Literacy

STEM 112. PLACE-BASED INTEGRATED SCIENCE. (3 Credits)

Through direct observation and investigation of the natural world, this course will use place-based pedagogies to help students gain greater understanding of physical, earth, and life science concepts. Additionally, the course will explore the history of scientific ideas and interactions of science, technology, and society.

Level: Non Degree Coursework, Professional Health Care, Undergraduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: Life Science, Physical Science, Scientific Literacy

STEM 115. ALGEBRA AND GEOMETRY - ELEMENTARY AND MIDDLE SCHOOL. (3 Credits)

In this course, teachers will develop their ability to design and implement mathematics instruction specific to algebra and geometry that is both reflective and mathematically significant. In particular, teachers will expand their own content knowledge, learn to elicit and build on children's multiple mathematical knowledge bases, and develop a practice of using high-demand tasks in order to enact Standards-based instruction in algebra and geometry.

Level: Non Degree Coursework, Professional Health Care, Undergraduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 120. METHODS OF SCIENCE, ENGINEERING, AND TECHNOLOGICAL DESIGN. (3 Credits)

This course engages students in STEM content with special emphasis on the nature of engineering, the nature of technology, and methods/strategies for communicating and teaching about STEM. Students apply these interrelated knowledge bases to interrogate sociotechnological issues and develop instructional/communication materials to instruct and inform learners and/or the public.

Level: Non Degree Coursework, Professional Health Care, Undergraduate

Prerequisite(s): None

Corequisite(s): None

Restrictions:

Enrollment limited to students with the Admitted to Teacher Education attribute.

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: Physical Science, Scientific Literacy

STEM 125. MEASUREMENTS AND STATISTICS FOR ELEMENTARY AND MIDDLE SCHOOL. (3 Credits)

The mathematics content of this course is focused on the following three domains: a) measurement: money, time, standard and nonstandard units of linear measurement, unit conversion, planar, and cubic measurement, b) probability: expected outcomes for simple and compound events, randomization, variability, theoretical probability distributions, and experimental probability distributions, and c) statistics: organization and interpretation of categorical and quantitative data through use of charts and graphs, characteristics data distributions, experimental design, and informal inference. An overarching theme of the course is identification and creation of classroom tasks that embody the Common Core mathematical practices with special attention to: reasoning abstractly and quantitatively, modeling with mathematics, and the appropriate use of tools. Students will engage in activities and projects that incorporate K-8 student thinking, simulations of real-world phenomena, and data analysis using technology. In order to ensure that instruction builds upon prior student knowledge, exposes common learning challenges, and results in expected learning outcomes, the sequencing of K-8 mathematics topics coupled with formative assessment will be second theme.

Level: Non Degree Coursework, Professional Health Care, Undergraduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 130. INDEPENDENT STUDY. (1-4 Credits)

Level: Non Degree Coursework, Professional Health Care, Undergraduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Web Instructed

Area(s) of Inquiry: None

STEM 135. MATHEMATICAL PRACTICES. (3 Credits)

In this course, pre-service teachers will go beyond introductory mathematics lesson planning and learn how to engage students in the mathematical practices inherent in the Common Core State Standards. In particular, we will focus on how to design and enact instruction that elicits and builds on children's thinking in all content domains as well as how to use curriculum materials, family and community resources, and other supports to help facilitate mathematical practice development in children.

Level: Non Degree Coursework, Professional Health Care, Undergraduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 136. SECONDARY SCIENCE METHODS. (3 Credits)

Level: Non Degree Coursework, Professional Health Care, Undergraduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 145. EQUITY IN MATH TEACHING AND LEARNING. (3 Credits)

In this hybrid (face-to-face and online) course, students will examine the ways in which all children regardless of their race, gender, income, sexuality, disability, or any other characteristic can learn and enjoy mathematics. Specifically, students will explore and evaluate dominant views of mathematics, recognize non-dominant ways to engage in mathematics, identify and study equitable strategies for teaching mathematics.

Level: Non Degree Coursework, Professional Health Care, Undergraduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 174. SCIENCE METHODS AND NATURE OF SCIENCE. (3 Credits)

This course engages students in science content, the nature of science, and methods/strategies for communicating and teaching about science. Students apply these interrelated knowledge bases to interrogate socioscientific issues and develop instructional/communication materials to instruct and inform learners and/or the public.

Level: Non Degree Coursework, Professional Health Care, Undergraduate

Prerequisite(s): None

Corequisite(s): None

Restrictions:

Enrollment limited to students with the Admitted to Teacher Education attribute.

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: Critical Thinking, Life Science, Scientific Literacy

STEM 199. SELECTED TOPICS. (1-3 Credits)

Level: Non Degree Coursework, Professional Health Care, Undergraduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 200. INTRODUCTION TO STEM EDUCATION. (3 Credits)

Level: Graduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 207. SCI CONTENT & PEDAG ELEM EDU 1. (3 Credits)

This course addressed science content and pedagogy for effective elementary school teaching. Students will explore and investigate natural phenomena and fundamental science ideas as well as explore related elementary student thinking and effective science instructional practices to support elementary student learning of science. Specifically, this course will explore concepts, teaching strategies, and learning related to forces, sound, light, ecosystems, heredity, and astronomy.

Level: Graduate

Prerequisite(s): None

Corequisite(s): None

Restrictions:

Enrollment is limited to Graduate level students.

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 208. SCI CONTENT & PEDAG ELEM EDU 2. (3 Credits)

This course addressed science content and pedagogy for effective elementary school teaching. Students will explore and investigate natural phenomena and fundamental science ideas as well as explore related elementary student thinking and effective science instructional practices to support elementary student learning of science. Specifically, this course will explore concepts, teaching strategies, and learning related to matter, diversity/distribution of life, erosion, weather, climate, natural selection, gravity, and magnetism.

Level: Graduate

Prerequisite(s): None

Corequisite(s): None

Restrictions:

Enrollment is limited to Graduate level students.

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 209. SCI CONTENT & PEDAG ELEM EDU 3. (3 Credits)

Level: Graduate

Prerequisite(s): None

Corequisite(s): None

Restrictions:

Enrollment is limited to Graduate level students.

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 210. INTEGRATED SCIENCE I. (3 Credits)

This course will help teachers gain greater understanding of physical, earth, and life science concepts necessary for implementation of the Next Generation Science Standards. Specifically, the course will explore: motion and forces, energy, matter, Earth systems, Earth and human activity, Earth's place in the universe, organisms, structure and function, heredity, ecosystems, and diversity of life.

Level: Graduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 211. INTEGRATED SCIENCE II. (3 Credits)

This course will help teachers gain greater understanding of physical, earth, and life science concepts necessary for implementation of the Next Generation Science Standards. Specifically, this course will explore: laws of physics, theories about matter, waves, our solar system, Earth cycles, Earth and human activity, biotic and abiotic factors in ecosystems, natural selection, genetics, and cell theory.

Level: Graduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 215. ALGEBRA AND GEOMETRY - ELEMENTARY AND MIDDLE SCHOOL. (3 Credits)

In this course, teachers will develop their ability to design and implement mathematics instruction specific to algebra and geometry that is both reflective and mathematically significant. In particular, teachers will expand their own content knowledge, learn to elicit and build on children's multiple mathematical knowledge bases, and develop a practice of using high-demand tasks in order to enact Standards-based instruction in algebra and geometry.

Level: Graduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 220. METHODS OF SCIENCE, ENGINEERING, AND TECHNOLOGICAL DESIGN. (3 Credits)

This course engages students in STEM content with special emphasis on the nature of engineering, the nature of technology, and methods/strategies for communicating and teaching about STEM. Students apply these interrelated knowledge bases to interrogate sociotechnological issues and develop instructional/communication materials to instruct and inform learners and/or the public.

Level: Graduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 225. MEASUREMENTS AND STATISTICS FOR ELEMENTARY AND MIDDLE SCHOOL. (3 Credits)

The mathematics content of this course is focused on the following three domains: a) measurement: money, time, standard and nonstandard units of linear measurement, unit conversion, planar and cubic measurement, b) probability: expected outcomes for simple and compound events, randomization, variability, theoretical probability distributions, and experimental probability distributions, and c) statistics: organization and interpretation of categorical and quantitative data through use of charts and graphs, characteristics data distributions, experimental design, and informal inference. An overarching theme of the course is identification and creation of classroom tasks that embody the Common Core mathematical practices with special attention to: reasoning abstractly and quantitatively, modeling with mathematics, and the appropriate use of tools. Students will engage in activities and projects that incorporate K-8 student thinking, simulations of real-world phenomena, and data analysis using technology. In order to ensure that instruction builds upon prior student knowledge, exposes common learning challenges, and results in expected learning outcomes, the sequencing of K-8 mathematics topics couples with formative assessment will be second theme.

Level: Graduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 230. INDEPENDENT STUDY. (1-5 Credits)

Level: Graduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Web Instructed

Area(s) of Inquiry: None

STEM 235. MATHEMATICAL PRACTICES. (3 Credits)

In this course, pre-service teachers will go beyond introductory mathematics lesson planning and learn how to engage students in the mathematical practices inherent in the Common Core State Standards. In particular, we will focus on how to design and enact instruction that elicits and builds on children's thinking in all content domains as well as how to use curriculum materials, family and community resources, and other supports to help facilitate mathematical practice development in children.

Level: Graduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 236. SECONDARY SCIENCE METHODS. (3 Credits)

Level: Graduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 237. 3-D LEARNING IN THE NGSS. (3 Credits)

Using scientific literacy as a starting point, this course investigates the integration of science/engineering practices, crosscutting concepts, and disciplinary core ideas as outlined in the Next Generation Science Standards (NGSS). After exploring the NGSS, the course will turn toward enacting inclusive strategies to effectively plan, teach, and assess students within the NGSS framework.

Level: Graduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 245. EQUITY IN MATH TEACHING AND LEARNING. (3 Credits)

In this hybrid (face-to-face and online) course, students will examine the ways in which all children regardless of their race, gender, income, sexuality, disability, or any other characteristic can learn and enjoy mathematics. Specifically, students will explore and evaluate dominant views of mathematics, recognize non-dominant ways to engage in mathematics, identify and study equitable strategies for teaching mathematics.

Level: Graduate, Non Degree Coursework

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 246. EQUITY IN TEACHING STEM. (3 Credits)

In this hybrid (face-to-face and online) course, students will examine the ways in which all children of their race, gender, income, sexuality, disability, or any other characteristic can learn and enjoy mathematics. Specifically, students will explore and evaluate dominant views of mathematics, recognize non-dominant ways to engage in mathematics, identify and study equitable strategies for teaching mathematics.

Level: Graduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 250. NATURES OF STEM. (3 Credits)

This course gives special attention to the history and natures of science, technology, engineering, and mathematics (STEM). The course engages each discipline separately as well as through comparison and contrast across disciplines. We will explore values, assumptions, major paradigms, and purposes of the STEM disciplines. Rationales for inclusion of the natures of STEM, connections to standards documents, and strategies for engaging and assessing K-12 students in the natures of STEM will be further explored.

Level: Graduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 260. MODELS AND METHODS OF STEM EDUCATION. (3 Credits)

This course focuses on models to help organize effective STEM instruction as well as strategies necessary to enact effective STEM instruction. These models and strategies will prepare teachers to engage their students in more inquiry-based, investigative problem-solving and standards-aligned lessons that require students to engage in critical thinking, productive struggle, and refining their ideas through collaborative knowledge construction.

Level: Graduate, Non Degree Coursework

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 274. SCIENCE METHODS AND NATURE OF SCIENCE. (3 Credits)

This course engages students in science content, the nature of science, and methods/strategies for communicating and teaching about science. Students apply these interrelated knowledge bases to interrogate socioscientific issues and develop instructional/communication materials to instruct and inform learners and/or the public.

Level: Graduate, Non Degree Coursework, Professional Health Care

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 280. INTRO TO COMPUTER SCIENCE I. (3 Credits)

Algorithms, programming, program structures and computing systems. Debugging and verification of programs, data presentation. Computer solution of problems using a high-level language.

Level: Graduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 281. INTRO TO COMPUTER SCIENCE II. (3 Credits)

Continuance of CS 65 using a block-structured language and emphasizing data abstraction. More general data structures and alternative implementations of them are used in programs, Sorting, searching and tree traversal algorithms are used and analyzed. Provides preparation for further study in computer science. Prerequisite: STEM 280 or equivalent.

Level: Graduate

Prerequisite(s): STEM 280

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 282. OBJECT-ORIENTED PROGRAMMING. (3 Credits)

This course introduces students to object-oriented programming (OOP). Students will learn OOP concepts such as classes, objects, encapsulation, messaging, data hiding, inheritance, and polymorphism. Generic programming and OOP design patterns will also be taught. Students will encounter advanced programming projects where unit testing and exception handling will be stressed. Other topics include serialization and GUI construction.

Level: Graduate

Prerequisite(s): STEM 281

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 283. COMP ORGANIZ & ASSEMBLY. (3 Credits)

Computer organization and architecture; internal representation of programs and data; assembly language programming; addressing techniques, macros, assemblers, linking; input/output concepts.

Level: Graduate

Prerequisite(s): STEM 281

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 284. OPERATING SYSTEMS. (3 Credits)

Introduction to the design, development and implementation of operating systems. Problems of resource allocation, concurrency file systems design, networking and the interface between hardware and software.

Prerequisite: STEM 283.

Level: Graduate

Prerequisite(s): STEM 283

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 285. METHODS FOR TEACHING K-12 COMPUTER SCIENCE. (3 Credits)

Building upon prior computer science coursework and teaching experiences, the aim of this course is to prepare teachers to teach middle and high school computer science courses. Course content will emphasize standards-based instruction in alignment with the Computer Science Teachers Association K-12 Standards both in terms of content taught and the development of practices. The structure of the course is based on class activities and discussions with significant preparation required outside of class. Teachers will be assigned reading, writing, and project-based tasks focused on eliciting student thinking, implementation of research-based instructional practices, selection and adaptation of curricular materials, and assessment for learning strategies.

Level: Graduate, Non Degree Coursework

Prerequisite(s): None

Corequisite(s): None

Restrictions:

Enrollment is limited to Graduate level students.

Enrollment limited to students in the Arts & Sciences or Education colleges.

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture

Area(s) of Inquiry: None

STEM 286. INTRO TO COMPUTER SYSTEMS. (3 Credits)

This course provides a foundation in computer systems, including topics in machine-level data representation, computer organization, operating systems, and networks. Issues presented by mobile devices will also be addressed.

Level: Graduate

Prerequisite(s): STEM 280

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 289. STEM MENTORING AND COACHING. (3 Credits)

Level: Graduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None

STEM 299. SELECTED TOPICS. (1-3 Credits)

Level: Graduate

Prerequisite(s): None

Corequisite(s): None

Restrictions: None

Primary grade mode: Standard Letter

Schedule type(s): Independent Study, Lecture, Web Instructed

Area(s) of Inquiry: None