

MATH 131 (1752) Calculus II KRSN MAT2020**

Prerequisite: MATH 130 Calculus I

Credit Hours: 5

This second course in the calculus sequence will cover the concepts of limits as applied to transcendental functions. Various substitution techniques for evaluating integrals will be presented. Problems involving areas, volumes of surfaces, and moments will be developed and solved. The course will cover sequences and series and look at properties of convergence and divergence. There will be an introductory look at differential equations and coverage of polar coordinates and parameterized curves. This course is required of any student seeking a degree in physics, mathematics, engineering, chemistry, and other related fields at a four-year institution.

MATH 201 (1753) Calculus III

Prerequisite: MATH 131 Calculus II

Credit Hours: 5

This third course will complete the calculus sequence. The course will cover infinite sequences and series and test of convergence and divergence. The calculus of multivariable functions, partial derivatives, and optimization of higher dimensional surfaces will be covered. The theory and use of vector-valued functions to calculus will be presented. Problems of areas, volumes, and moments will be extended to three-dimensional space and solved using multiple integration techniques (including the line integral, Stoke's Theorem, and Green's Theorem in vector fields). This course is required of any student seeking a degree in physics, mathematics, engineering, chemistry, and other related fields at a four-year institution.

MATH 202 (1740) Differential Equations KRSN MAT2030**

Prerequisite: MATH 201 Calculus III

Credit Hours: 3

This course will include solution techniques for the standard ordinary differential equations of the first and second order (with some generalization to higher order equations). Power series solution techniques for linear equations with constant coefficients will be presented. Solution of differential equations using the Laplace Transform will be presented. Applications to geometry and the physical science will be presented and covered. This course is required of any student seeking a degree in physics, mathematics, engineering, chemistry, and other related fields at a four-year institution.

Music

MUSI 101 (1051) Music Appreciation KRSN MUS1010**

Prerequisite: None

Credit Hours: 3

This is a survey course in basic fundamentals of music, and from this foundation moving into a better understanding of styles and music from different periods in history. The main purpose is for students to gain a broader understanding of and appreciation for many types and styles of music. We will also see how music is influenced by social, religious, political, and scientific advancements happening in the world at any given time.

MUSI 102 (0822) Children's Music KRSN MUS2010**

Prerequisite: None

Credit Hours: 3

This course is directed toward students in the elementary education program. It is designed to show how music can be taught and integrated into other areas of the elementary classroom curriculum. Traditional areas of music instruction will be covered including fundamentals of music, singing, playing instruments, listening, moving to music, and creative experiences with music. In addition, we will study multicultural approaches to teaching and practice writing lesson plans focusing on the needs and interests of young children.

*Refer to the Placement Testing Procedure 3.22, page 22 **Refer to Course Transfer, page 17

MUSI 104 (1092) History of Jazz and Rock

Prerequisite: None

Credit Hours: 3

This is a survey course that shows the logical musical derivatives and developments of jazz and rock music. At the same time the course will identify and listen to the important elements that compose the individual styles of jazz and rock music as they evolved from era to era.

Nursing

NURS 116 (8041) Pharmacology for Healthcare Providers

Prerequisite: None

Credit Hours: 3

This course introduces the principles of pharmacology, drug classifications, and the effects of selected medications on the human body. The nursing process is used as the framework for ensuring safe and effective nursing care for clients across the lifespan.

NURS 118 (5490) Intravenous (IV) Therapy for LPNs and RNs

Prerequisite: Advisor approval: Must have current LPN licensure and evidence of professional student liability insurance available through Labette Community College. Compliance with current tuberculin test and 10-panel drug screen, per Nursing Department Policy will be required prior to enrollment in course.

Credit Hours: 3

This elective course is designed to teach knowledge, skills, and competencies in administration of intravenous fluid therapy. Certification in IV Therapy for the State of Kansas will be received after successful completion of the State Exam. LPNs and RNs will both be rewarded with continuing education hours.

NURS 120 (5291) Fundamentals of Nursing

Prerequisite: Advisor Approval: Valid Nurse Aid Certification (CNA) & Admission to the LCC Nursing Program

Credit Hours: 10

Introduces fundamental skills, concepts, and principles of biopsychosocial needs of individuals. The nursing process provides a foundation for holistic nursing care. Presents basic concepts of drug calculation, administration, and classification of drugs, and nursing implications. Drug calculation must be passed with 94% before clinical administration of medication. Identifies important aspects of the nursing profession, such as historical, ethical, and legal issues. This class will introduce the role of the nurse as a member of the health care team and provides a foundation for nursing education and care using Maslow's Hierarchy of Needs. Nursing care of the older adult is introduced. Simulated skills are practiced in the nursing laboratory. Students will attend supervised clinical in the hospital and long-term care where they will participate in patient care.

NURS 122 (5295) Medical-Surgical Nursing

Prerequisite: Advisor Approval: Successful completion of NURS 120 Fundamentals of Nursing

Credit Hours: 9

Presents holistic nursing care of medical-surgical clients with common health needs. As a member of the healthcare team, the student will practice beginning management and leadership skills, and will differentiate delegation and clinical skills required of practical versus registered nurses.

NURS 124 (5294) Family Nursing I

Prerequisite: Advisor Approval: Successful completion of NURS 120 Fundamentals of Nursing

Credit Hours: 3

Uses a family-centered approach to focus on the holistic nursing care of the childbearing/rearing family. Experiences in Family Nursing I are designed to promote student understanding of the nursing care required of childbearing and pediatric clients and their families within the community. The student will utilize understanding of the nursing process to prioritize, plan and provide nursing care based upon Maslow's Hierarchy of Needs and the ANA Nursing Standards of Practice. Clinical experiences in acute care and community agencies afford the student experience in direct patient care of low-risk childbearing/rearing and pediatric individuals and their families.

*Refer to the Placement Testing Procedure 3.22, page 22 **Refer to Course Transfer, page 17