

HIST 104 (2254) World History Since 1500 KRSN HIS1040**

Prerequisite: None

Credit Hours: 3

A survey of world history from 1500 C.E. to the present, with emphasis on the causes and effects of the hegemony of Western Civilization, the emergence of globalization, and the historical roots of today's global issues.

HIST 108 (2210) Current World Affairs

Prerequisite: None

Credit Hours: 3

This course is an in-depth study of current events, trends and developments that affect daily life. In this course, we explore broad forces at play in the world: international economics, national interests, military power, nationalism, ethnicity, the environment and human rights. We will discuss world events as they unfold before our eyes and seek to understand them in light of their historical context. Students will leave this class with both a vision of the world's vast political landscape and the ability to better understand the multitude of events that comprise that landscape.

HIST 201 (2260) Kansas History

Prerequisite: None

Credit Hours: 3

A political, social, cultural, and economic survey of Kansas history from before the arrival of Europeans to the present day, emphasizing how the history of Kansas fits in to the larger scope of American history.

Industrial Technology

INDU 123 Electronic Devices

Prerequisite: INDU 125 Fundamentals of Electronics I w/Lab or Instructor's permission, INDU 167 Fundamentals of Electronics II w/Lab or Instructor's permission

Credit Hours: 3

This course will provide a fundamental knowledge of DC Power Supplies, Diodes, Transistors, Amplifiers and Troubleshooting. Operational Amplifiers, Oscillators, Integrated Circuits, Thyristors, Switch Mode Regulators, and AM/FM Radio Circuits

INDU 125 Fundamentals of Electronics DC/AC

Prerequisite: None

Credit Hours: 3

This course provides a fundamental knowledge of analysis techniques used to solve for current, voltage, wattage, and resistance in various DC/AC circuits.

INDU 127 Digital Logic Circuits

Prerequisite: INDU 125 Fundamentals of Electronics I-DC w/Lab or Instructor's Permission

Credit Hours: 3

This course provides knowledge in theory with building block circuits in logic systems and computers. Small scale ICs are used to learn the basic fundamentals of these systems and subsystems. Analysis techniques are taught to build the student's ability to troubleshoot. Binary mathematics and Boolean concepts are introduced and explained as needed.

INDU 131 Engineering Graphics

Prerequisite: None

Credit Hours: 3

This course is an introduction to the fundamental principles of graphic communication. It is also an introduction in the use of computer aided design software to produce 3-D geometry, assemblies, and dimensioned 2-D orthographic views. Traditional drawing techniques including manual drafting tools and equipment will be utilized as well. Orthographic projection, dimensioning techniques, tolerance methods, fits and allowances, and sectioning methods are covered.

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

INDU 155 OSHA Safety 10

Reading Placement Test Level: None

Prerequisite: None

Credit Hours: 1

This course will include OSHA standards assuring proper safety techniques for all types of circuits and components.

INDU 167 Fundamentals of Electronics DC/AC Lab

Prerequisite: Enrolled in INDU 125 Fundamentals of Electronics I w/Lab

Credit Hours: 3

Provides a fundamental knowledge of analysis techniques used to solve for current, voltage, wattage, resistance, and impedance in various AC Circuits.

INDU 168 Electronic Devices Lab

Prerequisite: INDU 125 Fundamentals of Electronics DC/AC or Instructor's permission, INDU 167 Fundamentals of Electronics DC/ AC Lab or Instructor's permission, Co-enrolled in, or successful completion of INDU 123 Electronic Devices

Credit Hours: 3

The course will include DC Power Supplies, Diodes, Transistors, Amplifiers, Troubleshooting, Operational Amplifiers, Oscillators, Integrated Circuits, Thyristors, Switch Mode Regulators, and AM/FM Radio Circuits.

INDU 169 Digital Logic Circuits Lab

Prerequisite: INDU 125 Fundamentals of Electronics I-DC w/Lab or Instructor's Permission, INDU 167 Fundamentals of Electronics DC/AC Lab or Instructor's Permission, and Co-enrolled in, or successful completion of INDU 127 Digital Logic Circuits, Co-enrolled in, or successful completion of INDU 155 OSHA Safety 10

Credit Hours: 2

This course will provide lab practices of course INDU 127 with building block circuits in logic systems and computers in a hands-on environment. Small scale IC's are used to learn the basic fundamentals of these systems and subsystems. Analysis techniques are taught to build the student's ability to troubleshoot. Students will also successfully obtain an OSHA 10 certificate from an online source during the course.

INDU 210 Computer Aided Drafting & Design

Prerequisite: INDU 131 Engineering Graphics

Credit Hours: 3

This course will include the use of computer aided design software to generate complex 3-D geometry for the purpose of communicating the following: manufacturing information, detail design information, dimensioning and tolerance data, and surface finish. This course will teach the student more advanced drafting skills. It will take the skills developed in Engineering Graphics I and further develop those skills in the art of drafting. The student will be expected to develop acceptable skills in the art of drafting. Additionally, the following areas will be covered: geometric tolerances, auxiliary views, threads and fasteners, assembly and working drawings, the design process, and pictorial drafting techniques.

Mathematics

MATH 95 Beginning Algebra with Review

Prerequisite: Placement Test Recommendation

Credit Hours: 4

This course will build skills in basic algebra concepts, confidence, and skills to successfully master math classes, including strategies to reduce math anxiety improve test taking skills. Topics covered in the course will include the basic language and terms of algebra, rules for signed numbers, techniques for solving linear, quadratic, and literal equations rules and properties for exponents as applied to algebraic expressions and the graphing and solving of linear equations and linear systems in two unknowns. (Nontransferable)