### HEALTH SCIENCES COURSE DESCRIPTIONS

(Academy started in 2008-09)

1

#### Year 1

### **NONCR - Introduction to Health Careers (S1)** Prerequisite: None.

This class will be offered as a high school introductory course for the first few weeks of the Career Academy. No credit is offered for either college or high school, as it is an orientation course with the purpose of introducing students to the broad range of career opportunities in the health care field. (Note: Intro to Health Careers is part of the Medical Terminology I class)

### **MEDA 1101 - Medical Terminology I (2 quarter credits) (S1)** Prerequisite: None.

Introduction to medical terms. A system for building a basic structure of medical terms for students. Pronouncing, spelling, defining terms and common medical abbreviations will be included.

### MEDA 1201 - Medical Terminology II (3 quarter credits) (S2) Prerequisite: MEDA 1101 & Intro Health

Prerequisite: MEDA1101

A continuation of MEDA1101. Terminology relating to body systems and disorders. Intended to increase medical vocabulary. Continuing system for building a medical vocabulary with emphasis on anatomy, physiology and diseases. Divided into "Basic Understanding and Greater Comprehension."

#### MEDA 1204 - First Aid (2 quarter credits) (S2)

Prerequisite: None.

First aid and emergency care developed by the American College of Emergency Physicians. (Note: First Aid will be taught along with Medical Terminology II).

### NURA 1401 - Basic Nursing Assistant BNA (6.5 quarter credits) (Year-long) Prerequisite: None.

Completion of the class meets the Nebraska
Department of Health requirements for employment as a
Nursing Assistant. The course includes classroom, nursing lab
and clinical experience in a health care facility. (Note: In the
Career Academy, this class has been taught in two semesters:
BNA I and BNA II. This class will be offered in both year one
and two, but priority is given to seniors. Currently, SENCAP
is debating as to whether this class will be done in only one
semester in 2010-2011.)

#### Year 2

### MEDA 1202 - Communication in Allied Health (4.5 quarter credits) (S2) Prerequisite: None.

For the students in healthcare to learn basic principles of human behavior and apply a personalized approach to patient care and effective relationships with co-workers.

BIO 1210 - Human Anatomy & Physiology I (6 quarter credits) (S1) Prerequisite: None. MEDA 1101 & MEDA 1201 are recommended. This course is difficult in content, and availability in college with a 50% fail rate at the college level. Course may be taken in first year in the Academy. Introduction to anatomy and physiology for students in biological, medical and health-related programs. Relationships between structure and function. Chemical, cellular and tissue levels of organization. Introduction to principle systems of the human body. Structure and function of the integumentary skeletal, muscular and nervous systems of the body. Important physiology experiments and structural identification experiments.

#### Future Courses being proposed by SENCAP

### MEDA 1406 - Basic Pharmacology (2 quarter credits) NOT Offered 2010-11

<u>Prerequisite</u>: BIOS1000 or 1210, 1140 Introduction to legal aspects and government regulations, medication resource material, types of medication, route of administration, actions and effects of drugs and drugs used on various systems. (Note: Offered as an optional course during 2010-2011 Health Academy)

### MEDT 1100 - Procedures in Phlebotomy (2. quarter credits) NOT Offered 2010-11

Introduction to the principles and skills needed to safely perform venipuncture and capillary blood collection techniques and special collection procedures. Quality assurance procedures pertaining to collection and transport of specimens, laboratory safety, ethical and legal issues pertaining to phlebotomy, and anatomy and physiology of cardiovascular system included. Supervised instruction and experience in collection techniques in lab. (Note: Offered as an optional course during 2010-2011 Health Academy)

### BUSINESS COURSE DESCRIPTIONS

Academy started in 2009-2010 (Seniors given first priority for Business classes)

### Year 1

## BSAD 1050 - Introduction to Business (4.5 quarter credits) (S1) Prerequisite: None.

An introductory study and overview of the role of business in society, as well as a discussion of the various disciplines of business, including an overview of business organization, management, marketing, human resource management, and finance. Also, a study and discussion of various strategies for success of specific public and private firms, as well as small business. Vocabulary from business will be used to understand and interpret business news and information.

### ENTR 1050 - Introduction to Entrepreneurship (4.5 quarter credits) (S2) Prerequisite: None.

The student will evaluate the business skills and commitment necessary to successfully operate an entrepreneurial venture and review the challenges and rewards of entrepreneurship. They will understand the role of entrepreneurial businesses in the United States and the impact on our national and global economy.

### Year 2

#### BSAD 2310 - Business Ethics (3 quarter credits) (S2)

May have a prerequisite of Writing/English competency to prepare for ENGL1010 Composition I. To qualify for ENGL 1010, score at least a 75 or higher on the COMPASS or ACT English of 19 or higher.

Study of different perspectives of ethics and impact on organizations and individuals. Current ethical issues as they relate to business.

### BSAD 2520- Principles of Marketing (4.5 quarter credits) (S1) Prerequisite: BSAD 1050

A study of the development of an effective marketing program including consumer behavior, product, pricing, distribution, and promotional strategies.

### BSAD 2540 - Principles of Management (4.5 quarter credits) (S2) Prerequisite: None.

Introduction to management theory and practice for supervisors of employees or managers of organizations. Functions of planning, organizing, directing, controlling and supervising. New and rapidly developing areas of management.

#### **EDUCATION COURSE DESCRIPTIONS**

Academy started in 2009-2010.

### Year 1

EDUC 1310 - Introduction to Education (4.5 quarter credits) (S1) Prerequisite: None.

This class will give students an extensive overview of the various career opportunities in the educational field. Learning and teaching strategies will be reviewed and discussed, as well I as some brief history and background on how the educational system has evolved.

# ECED 1150 - Introduction to Early Childhood Education (4.5 quarter credits) (S1) Prerequisite: None.

<u>Prerequisite</u>: Introduction to Education This class will introduce students to the approaches, methods and procedures for meaningfully incorporating computers, media and other technologies into teaching and learning in the K-12classroom.

An overview of early childhood education, history, trends and the philosophies of various programs, diversity, inclusion, licensing standards, current legislation, professionalism and advocacy are examined

# **EDUC 2500 - Fundamentals of Child Development for Education (4.5 quarter credits) (S2)** Prerequisite: None.

Fundamental concepts and principles of human development with reference to cognitive and social/emotional development from infancy to early adolescence. Biosocial forces which affect behavior and development in children in relation to educational practice.

### **EDUC 2590 - Educational Technology (4.5 quarter**

credits) (S2) Prerequisite: EDUC 1310

Prerequisite: Introduction to Education

This class will introduce students to the approaches, methods and procedures for meaningfully incorporating computers, media and other technologies into teaching and learning in the K-12classroom.

### Year 2

No courses will be offered for 2010-11 School Year at WHS unless 8 or more seniors in the Northern Academy schools would sign up for the following courses.

All courses listed for Year 1 are available for Year 2 plus:

ECED 1340 - How Children Learn (3 quarter credits) (S2) (Not Certain if this course transfers to UN-L) Theory, methods, and planning techniques for teaching the young child in relation to thinking patterns and learning styles

### INDUSTRIAL, MANUFACTURING, ENGINGEERING COURSE DESCRIPTIONS

Academy started in 2010-2011.

Note: A possibility that a 3rd day for the Academy each week, instead of two, barring any safety/legal issues, where students could intern or have "hands-on" experience in a work place.

#### Year 1

### **ENER 1100 Introduction to Energy Operations (4.5** quarter credits) (S1)

Prerequisite(s): None

Introduction to the history of electric and fluid power in the U.S. including deregulation. Private and public utilities are discussed. Methods of commercial power generation including fossil fuels, nuclear power and renewable energy generation. Includes overview of electrical transmission and distribution systems. System reliability and governance are covered.

### Shop Procedures/Safety (4.5 quarter credits) (S2)

This is actually two SCC courses:

AUTT 1000 Shop Procedures (2 quarter credits) -Introduction to Automotive Shop Procedures and repair. This course deals with the many basic elements of automotive repair and the proper use of hand and power tools.

### **AND**

AUTT 1100 Shop Safety and Repair (2.5 quarter credits) - This course deals with shop safety, OSHA Hazard Communication Standards/Hazard Chemical right-toknow. Thread repair, tube flaring, fasteners, micrometers and other equipment used by the professional automotive technician.

Central Community College will accept: Northeast Community College has no equivalent, so they would transfer as elective credit. Metro: TBD.

### Year #2: Not Available in 2010-2011

### MFGT 1413 Electrical Fundamentals (5 quarter credits) (S1)

Math prerequisite of MATH 1050 "Thinking mathematically". I don't know if that prerequisite will be waived or if there is a high school math course eauivalent.

Fundamental concepts of electricity. Energy, basic electrical fundamentals, and circuits and devices. Application of Ohm's Law, power and efficiency formulas to problems involving basic circuits. Sources and effects of electric current, magnetism, electromagnetism, generators, and motors." This course has a math prerequisite of math 1050 "thinking mathematically". I don't know if that prerequisite will be waived or if there is a high school math course equivalent.

### MFGT 1125 Materials of Industry (5 quarter credits) (S2) Prerequisite: ?

Introduction to materials (steel, irons, etc.) Used in industry. Properties, uses, specifications, availability, and heat treatment. Special attention given to tool steel."

#### Notes:

- 3-quarter credits are equal to 2 semester credit hours at a 4-year college.
- 4.5-quarter credits are equal to 3 semester credit hours at a 4-year college.
- 6-quarter credits are equal to 4 semester credit hours at a 4-year college.
- What is true today about transferability may not be true tomorrow. To gather information on the transferability of the courses being offered by SCC for the Career Academy, use the following link. This link takes you to transfer guides organized by "receiving" college. The colleges maintain their own guides/pages and come closer to being the final say than any materials provided by SENCAP: http://www.southeast.edu/academics/transfer.asp