ALH A008N: COMPUTATIONAL SKILLS FOR CONSUMER AND HEALTH SCIENCES IV NONCREDIT

Item	Value
Curriculum Committee Approval Date	12/02/2020
Top Code	120100 - Health Occupations, General
Units	0 Total Units
Hours	4.5-9 Total Hours (Lecture Hours 4.5-9)
Total Outside of Class Hours	0
Course Credit Status	Noncredit (N)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	Yes; Repeat Limit 99
Grading Policy	P/NP/SP Non-Credit (D)

Course Description

This course covers ratios and proportions required for dosage calculations, dimensional analysis, and other job-specific applications related to the allied health professions. Allied health professionals need to be able to use, like proportions, to solve problems in a variety of allied health applications. Dental Assisting and Radiologic Technology use, like proportions, to adjust exposure factors for changes in distance. Drug dosage calculations typically use ratios and proportions to solve for differences in concentrations and weight. Sonography signal intensity is calculated by determining the difference between transmitted/received signal and allowing for distance traveled. NOT DEGREE APPLICABLE. Not Transferable.

Course Level Student Learning Outcome(s)

1. Students will be able to demonstrate the ability to solve multi-step formulas using ratios and proportions for consumer and health science applications.

Course Objectives

- 1. Use ratios and proportions to solve computations within the allied health sciences.

Lecture Content

Allied health professionals need to be able to use like proportions to solve problems in a variety allied health applications. Dental Assisting and Radiologic Technology use like proportions to adjust exposure factors for changes in distance. Drug dosage calculations typically use ratios and proportions to solve for differences in concentrations and weight. Sonography signal intensity based on calculating the difference between transmitted and received signal allowing for distance traveled.

Method(s) of Instruction

- Enhanced NC Lect (NC1)
- Live Online Enhanced NC Lect (NC9)

Writing Assignments

Written assessments and applied examples.

Out-of-class Assignments

Practice problems and questions

Demonstration of Critical Thinking

Develop the ability to use ratios and proportions to solve multi-step problems in consumer and health sciences.

Required Writing, Problem Solving, Skills Demonstration

Solve presented problems through the acquired skills and apply said skills to real-life scenarios.

Eligible Disciplines

Cardiovascular technology: Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience. Child development/early childhood education: Masters degree in child development, early childhood education, human development, home economics/family and consumer studies with a specialization in child development/early childhood education, or educational psychology with a specialization in child development/ early childhood education OR bachelors degree in any of the above AND masters degree in social work, educational supervision, elementary education, special education, psychology, bilingual/bicultural education, life management/home economics, family life studies, or family and consumer studies OR the equivalent. Masters degree required. Culinary arts/food technology (food service, meat cutting, baking, waiter/w...: Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience. Dental technology (dental assisting, dental hygiene): Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience. Dietetic technician: Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience. Dietetics: See nutritional science/dietetics Family and consumer and studies/home economics: Masters degree in family and consumer studies, life management/home economics, or home economics education OR bachelors degree in any of the above AND masters degree in child development, early childhood education, human development, gerontology, fashion, clothing and textiles, housing/interior design, foods/nutrition, or dietetics and food administration OR the equivalent. Masters degree required. Fashion and related technologies (merchandising, design, production): Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience. Health care ancillaries (medical assisting, hospice worker, home care aide...: Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience. Kinesiology: Masters degree in kinesiology, physical education, exercise science, education with an emphasis in physical education, kinesiology, physiology of exercise, or adaptive physical education OR Bachelors degree in any of the above AND Masters degree in any life science, dance physiology, health education, recreation administration or physical therapy OR the equivalent. Nutritional science/dietetics: Masters degree in nutrition, dietetics, or dietetics and food administration OR bachelors degree in any of the above AND masters degree in chemistry, public health, or family and consumer studies/home economics OR the equivalent.

(Note: A bachelors degree in nutrition, dietetics, or dietetics and food administration, and certification as a registered dietician, is an alternative qualification for this discipline.) Masters degree required. Title 5, section 53410.1 Radiological technology: Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience. Respiratory technician: Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience.