

ALH A006N: COMPUTATIONAL SKILLS FOR CONSUMER AND HEALTH SCIENCES II 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
Open Entry/Open Exit	Yes
Grading Policy	P/NP/SP Non-Credit (D)

Course Description

This course reviews the Order of Operations as it applies to various uses with the allied health professions, an example would be using Order of Operations to determine quality assurance for fluoroscopy units within a radiology suite. The equation uses a baseline value against an acquired value; $nmA/bmAXnkVp\ 2/bkVp2$. Within the allied health professions there are a multitude of formulas that need to be solved; for example, in respiratory care, the alveolar gas equation; medical assisting requires students to be able to calculate drips per minute based on solution strength. NOT DEGREE APPLICABLE. Not Transferable.

Course Level Student Learning Outcome(s)

1. Students will be able to successfully calculate consumer and health sciences problems using the order of operations.

Course Objectives

- 1. Perform the order of operations for computational problems allied health sciences

Lecture Content

Review the Order of Operations as it applies to various uses with the allied health professions, an example would be using Order of Operations to determine quality assurance for fluoroscopy units within a radiology suite. The equation uses a baseline value against an acquired value; $nmA/bmAXnkVp2/bkVp2$. Within the allied health professions there are a multitude of formulas that need to be solved; for example, in respiratory care, the alveolar gas equation; medical assisting requires students to be able to calculate drips per minute based on solution strength.

Method(s) of Instruction

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

Instructional Techniques

Lecture with written assignments to determine student progress.

Writing Assignments

Written assignments and applied examples.

Out-of-class Assignments

None

Demonstration of Critical Thinking

Demonstration of utilizing the order of operations to solve formulas for 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 bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience. Child development/early childhood education: Master's 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 bachelor's degree in any of the above AND master's 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. Master's degree required. Culinary arts/food technology (food service, meat cutting, baking, waiter/w...: Any bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience. Dental technology (dental assisting, dental hygiene): Any bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience. Diagnostic medical technology-diagnostic medical sonography, neurodiagnosti...: Any bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience. Dietetic technician: Any bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience. Family and consumer studies/home economics: Master's degree in family and consumer studies, life management/home economics, or home economics education OR bachelor's degree in any of the above AND master's 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. Master's degree required. Fashion and related technologies (merchandising, design, production): Any bachelor's 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 bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience. Kinesiology: Master's degree in kinesiology, physical education, exercise science, education with an emphasis in physical education, kinesiology, physiology of exercise, or adaptive physical education OR Bachelor's degree in any of

the above AND Master's degree in any life science, dance physiology, health education, recreation administration or physical therapy OR the equivalent. Nutritional science/dietetics: Master's degree in nutrition, dietetics, or dietetics and food administration OR bachelor's degree in any of the above AND master's degree in chemistry, public health, or family and consumer studies/home economics OR the equivalent. (Note: A bachelor's degree in nutrition, dietetics, or dietetics and food administration, and certification as a registered dietitian, is an alternative qualification for this discipline.) Master's degree required. Title 5, section 53410.1 Radiological technology: Any bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience. Respiratory technologies: Any bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience. Speech language pathology: Master's degree in speech pathology, speech language pathology, speech language and hearing sciences, communicative disorders, communicative disorders and sciences, communication sciences and disorders, or education with a concentration in speech pathology, OR the equivalent. Master's degree required.