

ALH A005N: COMPUTATIONAL SKILLS FOR CONSUMER AND HEALTH SCIENCES I 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 reviews and practices the basic operations of computations: addition, subtraction, multiplication, and division as applied to specific job skills/tasks in allied health professions/occupations. Medical assisting and respiratory care (to name two examples) require calculations involving multiple elements, students need to understand basic computational concepts to successfully calculate dosage (medical assisting) or volumes (respiratory care). NOT DEGREE APPLICABLE. Not Transferable.

Course Level Student Learning Outcome(s)

1. Students will be able to demonstrate the ability to convert fractions, decimals, and percents.

Course Objectives

- 1. Perform basic arithmetic computations using fractions, decimals, and percentages as required for allied health professions.

Lecture Content

1. Review and practice the basic operations of computations: addition, subtraction, multiplication, and division as applied to specific job skills/tasks in allied health professions/occupations. Because some calculations in medical assisting and respiratory care (to name two examples) require calculations involving multiple elements, students need to understand basic computational concepts to successfully calculate dosage (medical assisting) or volumes (respiratory care). 2. Fractions are often used to calculate adjustments to medication and other forms of intervention within allied health professions often based on either patient age or weight; thus, students need to have the skills necessary to successfully perform these requirements to ensure patient safety. In some instances, the use of decimals will be used instead of fractions, so being able to convert fractions to decimal values becomes a necessary skill. 3. Converting fractions and decimals into

percentages would be the final step in adjusting dosage or volume in applied applications.

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 assessments and applied examples.

Out-of-class Assignments

None

Demonstration of Critical Thinking

Develop understanding of basic arithmetic computations.

Required Writing, Problem Solving, Skills Demonstration

Solve presented problems through acquired skills and applied 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. 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. Education: Masters degree in education OR the equivalent. Masters degree required. 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. Speech language pathology: Masters 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. Masters degree required.