



AHE106 - Math for Healthcare Careers

Document Type: District Master Course Outline

Proposal Type: New Course

Requester(s): Jennifer M Evans Wendy J Price

College: South

Origination Approved: 03/05/2015 - 9:00 AM

BASIC INFORMATION

Requester(s): Jennifer M Evans
Wendy J Price

College: South Seattle College

Division/Dept: Professional Technical

Dean: Wendy J Price

Peer Reviewer(s): Cynthia Dodd

COURSE INFORMATION

Proposed Course Number:

Prefix: **AHE** Number: **106**

Request a new Prefix

This will be a common course

Full Title: Math for Healthcare Careers

Abbreviated Title: Math for Healthcare

Catalog Course Description:

Students will learn basic computations with fractions and decimals, ratio and proportion, percentage, measurement systems, diluting of solutions, graphs, dosage and concentration problems, and basic algebra and statistics.

Course Length: 11 Weeks

Request an Exception

Topical Outline:

1. Math as a Healthcare Function
2. Numerical Systems
3. Measurement Systems
4. Whole Numbers
5. Decimals
6. Fractions
7. Ratio and Proportions
8. Percents
9. Conversions
10. Medication Dosage Calculations
11. Weights and Measures
12. Measuring Intake and Output

COURSE CODING

Funding Source: 1.....State
Institutional Intent: 21.....Vocational Preparatory

This Course is a requirement for the following program(s):
(No Programs Selected)

[X] My Course Proposal is a requirement for a program not on this list
Program Title/Description/Notes:
Medical Office Professional

Will this course transfer to a 4-year university? No
Is this course designed for Limited English Proficiency? No
Is this course designed for Academic Disadvantaged? No
Does this course have a Workplace Training component? No

CIP Code: 27.9998 [] Request Specific CIP Code
EPC Code: 373 [] Request Specific EPC Code

Credits:
Will this course be offered as Variable Credit? No
List Course Contact Hours
Lecture (11 Contact Hours : 1 Credit) 33
Lab (22 Contact Hours : 1 Credit) 0
Clinical Work (33 Contact Hours : 1 Credit) 0
Other (55 Contact Hours : 1 Credit) 0
Total Contact Hours 33
Total Credits 3

COLLEGE SUPPLEMENTAL

Proposed Quarter of Implementation: NA [X] Request Provisional Exception
Winter 2015

Class Capacity: 25

Note: The following questions are being asked in order to fulfill Seattle Colleges District VI and AFT Seattle, Local 1789 Agreement language:

Have you discussed the class cap for the course with your unit administrator and with other unit faculty that will be teach the course?

Yes, discussion has been held.

Is the class cap number that you have indicated mutually agreed upon by unit faculty and unit administrators?

Yes, agreement has been reached.

Modes of Delivery: (Check all that apply)

- Fully On Campus Fully Online Hybrid Correspondence Credit by Exam
 Seminar Visual Media Other Explanation:

Class Schedule Description:

Students will learn basic computations with fractions, decimals, ratio and proportion, percentage, measurement systems, diluting of solutions, graphs, dosage and concentration problems, and basic algebra and statistics for the purposes of processing insurance and coding claims. Pre-req: CASAS 224 or better or by instructor approval

Course Prerequisite(s):

CASAS scores of 224 or better by instructor approval

Course Corequisite(s):

None

AA Degree Outcomes: (If Applicable)

Student Learning Outcomes:

Computation

Use arithmetic and other basic mathematical operations as required by program of study

1,2,3,4,5,6

Apply quantitative skills for academic and career purposes

1,2,3,4,5,6

Critical Thinking and Problem-Solving

Think critically in evaluating information, solving problems, and making decisions

1,2,3,4,5,6

Technology

Select and use appropriate technological tools for academic and career tasks

5,6

Personal Responsibility

Uphold the highest standard of academic honesty and integrity

1,2,3,4,5,6

Respect the rights of others in the classroom, online and in all other school activities

1,2,3,4,5,6

Attend class regularly, complete assignments on time and effectively participate in classroom and online discussions, group work and other class-related projects and activities

1,2,3,4,5,6

Information Literacy

Independently access, evaluate and select information from a variety of appropriate sources

5,6

Have knowledge about legal and ethical issues related to the use of information

5,6

Use information effectively and ethically for a specific purpose

5,6

Program Outcomes:

Prof tech outcome Included in Course Outcome Number AHE 106	Certificate Program Outcomes
1	1. Apply billing and coding rules to all incoming and outgoing claims
5,6	2. Apply correct ICD-9, ICD-10, CPT, and HCPCS codes to all claims
5,6	3. Apply correct ICD-9, ICD-10, CPT, and HCPCS codes to patient medical records
1,2,3,4,5,6	4. Determine the HIPAA approved codes for claims and medical records by use of Anatomy/Physiology, pharmacology, and pathophysiology by applying correct codes,
1,2,3,4,5,6	5. Employ the use of HIPAA laws and regulations related to all patient data and interactions by applying correct codes.
1,2,3,4,5,6	6. Enable students to successfully attain CCS-P, CCS-H, CPC-P or CPC-H certification

Course Outcomes / Objectives:

1. Apply Math as a Healthcare Function for coding claims.
2. Apply BASIC mathematic principles and numerical Systems for coding pharmacology and anesthesia.
3. Apply Measurement Systems for coding purposes.
4. Relate the differences between whole numbers, decimals, and fractions for coding purposes
5. Distinguish the use of Ratio and Proportions, Percents, and conversions for coding and on insurance claims

6. Validate Medication Dosage Calculations, weights and measures, measuring intake and output for coding purposes.

SLO #	Included in Course Objective Number AHE106	SSC Student Learning Outcomes
SLO 1.1		Communication - Read and listen actively to learn and communicate.
SLO 1.2		Communication - Speak and write effectively for academic and career purposes.
SLO 2.1	1,2,3,4,5,6	Computation - Use arithmetic and other basic mathematical operations as required by program of study.
SLO 2.2	1,2,3,4,5,6	Computation - Apply quantitative skills for academic and career purposes.
SLO 3.1		Human Relations - Use social skills to work in groups effectively.
SLO 3.2		Human Relations – Have knowledge of the diverse cultures represented in our multicultural society.
SLO 4.1	1,2,3,4,5,6	Critical Thinking—Think critically in evaluating information, solving problems, and making decisions.
SLO 5.1	1,2,3,4,5,6	Technology - Select and use appropriate technological tools for academic and career tasks.
SLO 6.1	1,2,3,4,5,6	Personal Responsibility – Uphold the highest standards of academic honesty and integrity.
SLO 6.2	1,2,3,4,5,6	Personal Responsibility – Respect the rights of others in the classroom, online, and in all other school activities.
SLO 6.3	1,2,3,4,5,6	Personal Responsibility – Attend class regularly, complete assignments on time, and effectively participate in classroom and online discussions, group work, and other class-related projects and activities.
SLO 6.4		Personal Responsibility – Abide by appropriate safety rules in laboratories, shops, and classrooms.
SLO 7.1	5,6	Information Literacy—Independently access, evaluate, and select information from a variety of appropriate sources.
SLO 7.2	5,6	Information Literacy – Have knowledge about legal and ethical issues related to the use of information

SLO 7.3	5,6	Information Literacy - Use information effectively and ethically for a specific purpose.
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Explain the student demand for the course and potential enrollment:

AHIMA has reported a shortage of 30% for those entering the medical administrative field and for incumbent workers who need to transition from general administration positions into billing and coding positions.

Health care employers are facing the challenge of implementing ICD-10 codes. This new code set will encompass approximately 68,000 new codes. With hospitals and clinics planning to train, they are anticipating the need for additional staff to face reduced productivity, at least during the transition. Offering these courses in multiple modes will allow students more access to relevant coursework.

Explain why this course is being created:

Due to a shortage of qualified coders and the challenge for those incumbent workers to access classes taught only face to face, offering these courses in multiple modes will increase student access and ability to complete relevant coursework.

What challenges, if any, do you foresee in offering this course:

Instructors will assist in the LMS instruction or Canvas introduction to support this course.

Notations: List any additional course fees or any additional notes (e.g. Permission required)

Students can take select courses without taking the whole sequence.

This is to certify that the above criteria have all been met and all statements are accurate to the best of my knowledge.

Faculty involved in originating this program:

Jennifer M Evans
Print Name

Jennifer M Evans
Signature

3/3/2015
Date

Wendy J Price
Print Name

Wendy J Price
Signature

3/3/2015
Date

Dean:

Wendy J Price
Print Name

Wendy J Price
Signature

10/3/2014
Date

Executive Workforce Dean

Wendy J Price
Print Name

Wendy J Price
Signature

10/3/2014
Date

Results of SSCC Curriculum Coordinating Council Findings

Participating Faculty Response and Remarks

- Recommended for approval
- Not recommended for approval

Chairman, Curriculum Coordinating Council:

Diane Schmidt
Print Name

Diane Schmidt
Signature

3/3/2015
Date

Vice President for Instruction:

Peter Lortz
Print Name

Peter Lortz
Signature

3/5/2015
Date