

Articulation Agreement

2018-2019

University Alaska Fairbanks

Interior Alaska Campus
810 Draanjik
Fairbanks, Alaska 99709

Yukon Koyukuk School District

4762 Old Airport Road
Fairbanks, Alaska 99709

Purpose:

In addition to the current Tech Prep Agreement between University of Alaska Fairbanks and Yukon Koyukuk School District, we have agreed to add the following course that is within CRCD Allied Health (HLTH) programs.

1. Yukon Koyukuk School District will follow a UAF HLTH curriculum in coordination with the administration and faculty of the University of Alaska Fairbanks pertaining to the following courses on the course below.
2. Yukon Koyukuk School District will teach for the attached outcomes.
3. The attached syllabus will follow the learning outcomes of the university-approved course listed.

UAF Course Number	UAF Course Title	Number of UAF Credits	Yukon Koyukuk School District Course Title
HLTH 116	Math in Health Care	3 Credits	Math in Health Care

1. The attached syllabus will be followed.
2. Yukon Koyukuk School District will provide necessary support for students to be successful in this course which may include computer support, reference books and academic assistance.
3. Interior Alaska Campus will process the registrations.
4. In order to receive concurrent credit, the student will register for the Tech Prep class during the semester in which the competencies will be completed.

Approvals:

Shawn Russell
Allied Health Department Co-Chair
Assistant Professor of Allied Health
Kuskokwim Campus
University of Alaska Fairbanks

Cathleen Winfree
Allied Health Dept.Co-Chair &
CTC Program Coordinator
UAF Community & Technical College,
University of Alaska Fairbanks

DocuSigned by:
Shawn Russell
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November 7, 2018

Signature

Date

DocuSigned by:
Cathy Winfree
F6CE4DF8E4744E3...

November 9, 2018

Signature

Date

Bryan Uher
Director
University of Alaska Fairbanks
Interior Alaska Campus
Fairbanks, Alaska

Patty Woody
Career and Technical Education
Coordinator
Yukon Koyukuk School District
Fairbanks, Alaska

DocuSigned by:
Bryan Uher
555ED2F2DA1142F...

November 20, 2018

Signature

Date

DocuSigned by:
Patty Woody
CCBD3BF25C434E0...

November 29, 2018

Signature

Date

Kevin Illingworth
Acting Dean-College of Rural and
Community Development
P.O. Box 6500
University of Alaska Fairbanks
Fairbanks, AK 99775-6500

Michele Stalder
Dean-Community and Technical College
604 Barnette Street
University of Alaska Fairbanks
Fairbanks AK 99701

DocuSigned by:
Kevin Illingworth November 29, 2018
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Signature _____ Date

DocuSigned by:
Michele Stalder November 29, 2018
8099F52F920443E...
Signature _____ Date

Anupma Prakash,
Provost and Executive Vice Chancellor
P.O. Box 7580
University of Alaska Fairbanks
Fairbanks, AK 99775-7580

Signature _____ Date

Mathematics in Healthcare

HLTH F116

Fall 2018

INSTRUCTOR:

Amy E. M. Brown

Phone: 388-0740

Email: aemoutrey@alaska.edu

Course dates 8/27/2018 – 12/15/18

Course Description

- Prerequisites: DEVM 050 or placement in DEVM 060 or higher
- Practical application of mathematics in health care including arithmetic review, decimals, fractions, percent, interest, ratio, proportion and metric measurement.
- Mathematical applications in medicine including measurement instruments, graphs, charts and medications.

Course Goals and student learning outcomes

On completion of this course the student should be able to:

1. Add, subtract, multiply and divide whole numbers, common fractions and decimal fractions.
2. Correctly round decimal fractions using conventional methods
3. Convert common fractions to decimal fractions and decimal fractions to common fractions.
4. Perform combined operations using both decimals and common fractions
5. Understand and calculate percentages, express percentages as equivalent decimals and fractions and common fractions.
6. Effectively use the metric system, household system and apothecary system measurements.
7. Make conversions between larger and smaller units in the metric, household and apothecary measurement systems.
8. Make conversions between metric system, household system and apothecary system measurement systems.
9. Convert temperature reading between Celsius and Fahrenheit.
10. Calculate and accurately express military time and the 12-hour clock.
11. Read and express Roman numerals.
12. Express ratios as equivalent fractions, decimals and percentages.
13. Prove the equality of a proportion using means and extremes or cross multiplication.
14. Determine the unknown term in a proportion.
15. Accurately utilize appropriate measuring tools for medication administration.
16. Read, annotate and create various graphs and charts related to medical practice.
17. Accurately calculate oral and parenteral dosages.
18. Accurately calculate dosages by weight.
19. Accurately calculate pediatric dosages.
20. Calculate intravenous flow rates and infusion times.
21. Read, interpret and accurately follow medication orders.
22. Calculate medication doses with ratio-proportion method, formula method and dimensional analysis method.
23. Calculate medication doses with confidence.

Required Text

Lesmeister. "Math Basics for the Health Care Professional." 5th ed. Pearson. ISBN: 9780134703695

Other Supplies

Simple calculator that adds, subtracts, multiplies and divides. Nothing fancy is needed.

Grading

You will have homework and quizzes almost weekly, a midterm exam, and a comprehensive final exam. Grades will be calculated using the following weighted:

20% Homework: 15 assignments

30% Quizzes: 15 quizzes

20% Mid-term Exam

30% Final Exam

Final grade percentages will be rounded to the nearest whole number by standard rounding practices.

A traditional grading scale will be used, without +/- grades, as follows:

A= 90-100%	An honor grade indicating that the student excels consistently and demonstrates a thorough mastery of course content.
B= 80-89%	The student consistently works at an above average level and has achieved a high level of competency in all areas of the course content
C= 70-79%	An understanding grade indicating that the student has an understanding of all concepts and can apply them consistently a majority of the time
D= 60-69%	The D student demonstrates lack of understanding of some or many concepts in the course and very frequently makes errors indicative of carelessness and lack of understanding.
F=<60%	A failing grade. The student has not demonstrated an adequate understanding of the course content, indicated by consistent mistakes regarding almost all concepts.
NB	A grade rarely given, generally reserved for those who never attend but fail to withdraw.
I	Indicates that the student was unable to finish work for the semester due to some unforeseen situation. An I grade must be negotiated with the instructor. The student must have a C or better to date and must have finished greater than 50% of the coursework at the time the incomplete grade is awarded.

Homework

All assigned homework will cover the material presented in class that day and are due the following class meeting. Time will be available in class to answer questions about the homework and work through any problems as a group if requested. Homework will not be assigned on exam days. Homework is to be hand-written in pencil or blue or black ink and all of your workings must be shown (even if a calculator is used). An answer sheet will be provided.

Quizzes

Nine quizzes will be offered throughout the semester. Quizzes will be taken after homework is discussed and the new lesson has been presented. Quizzes will be returned during the following class

period and corrections may be made for 25% of missed points. Corrections must be turned in the following class meeting.

Academic Honesty

Learning is a collaborative venture and you will learn a lot by interacting with your instructor and your classmates. You are encouraged to do that in class and on homework assignments. However, in this class, testing is a solo venture. All work that you present on exams is to be yours and yours alone, unless you are given other instructions. Please review the UAF student code of conduct in your UAF catalog. Cheating will result in a grade of zero for that exam. A second charge of cheating will result in expulsion from the class and a grade of F for that semester.

Instructional Methods

We will engage in skill development by demonstration, lecture, and practice.

Withdrawal

The deadline for student- and faculty-initiated drops (course does not appear on academic record) is Friday, September 7. After that you may complete an Add/Drop form and return it to the Registrar's Office. The deadline for student- and faculty-initiated withdrawals (W grade appears on academic transcript) is Friday, November 2. If you stop attending class after November 2, but do not officially withdraw from the course, you will receive an F for the course. If you are prevented from finishing class by some unforeseen event, you may negotiate an incomplete by talking with the instructor.

Classroom Courtesy:

- You must turn off cell phones and pagers during class time. You may not listen to your iPod or other music devices during class or exams.
- You may not bring your children, spouses or friends to class with you.
- You must demonstrate respect for all members of the class and staff.
- You may not engage in any activity which disrupts class or disturbs your fellow students. This includes chatting, passing notes and sleeping during class.

Missed assignments/ exams - makeup policies:

- I will accept late homework assignments, but will deduct 5% of the grade for each day that you are late turning in your assignment- regardless of the reason of your absence. If you know ahead of time that you will miss class, turn in your homework early. If you become ill and cannot make it to class you may drop off your assignment in my box in the Allied Health office on the 4th floor of the CTC building, scan and email it to me, or fax it to me by 9pm of the day it is due.
- You may make up exams that you miss by scheduling them with me. Missed exams should be made up within a week of the scheduled exam. However, you must also notify me within 24 hours of missed exam either by email or phone. If you fail to notify me, I will deduct 5% of your grade each day that you delay. Since email and phone is available 24/7, I will expect to hear from you even on the weekend.
- Quizzes may not be made up.

- Extenuating circumstances. The instructor reserves the option to waive the above conditions if there truly are extenuating circumstances that need to be considered.

Assistance and Support Services

Please do not hesitate to contact me for extra help. That is part of my role in your learning. I can meet with you before class or after class, or we can schedule some other time. Do not let yourself get behind, confused and especially not overwhelmed! In addition, the student learning center is on the first floor of UAF Community & Technical College, and offers math tutoring at various times during the week.

Student Services

The student assistance office in CTC 110 can help you with registration, fee payment, parking fees, polar express ID's and advising.

Disabilities Services

The Office of Disability Services implements the Americans with Disabilities Act (ADA), and ensures that UAF students have equal access to the campus and course materials. I will work with the Office of Disabilities Services (208 WHITAKER BLDG, 474-5655) to provide reasonable accommodation to students with disabilities.

Sexual Harassment/Sexual Misconduct

Sexual Harassment offenses include, but are not limited to: sexual harassment, non-consensual sexual contact (or attempt to commit same), non-consensual sexual intercourse (or attempt to commit same), or sexual exploitation. In compliance with the Civil Rights laws, the University of Alaska Systems has implemented policies to ensure that our learning and employment institution is free from unlawful sexual harassment and a safe and welcoming environment for everyone.