FORMAT 1

Submit original with signatures + 1 copy + electronic copy to Faculty Senate (Box 7500). See <u>http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures-/</u> for a complete description of the rules governing curriculum & course changes.

TRIAL COURSE OR NEW COURSE PROPOSAL (Attach copy of syllabus)

SU	BMITTED BY:											
	Department Developmental E Prepared by Sandra Wildfene		tal E	Education Colle		College	ge/School		College of Rural and Community Development		ural and	
			fene	r		Phone		-	Com	inunit,	907.	474.1931
	Email Contact siwildfeuer@ala		Dalas	Ska edu Faculty Contact		-	Sandra Wildfeuer		Vildfener			
	sjwindreder e ala		= 4145	Sha.cuu					multuti			
	1. ACTION DESIRED (CHECK ONE): 2. COURSE IDENTIFICATION:		(E):	Tria	l Course	9		Ν	lew Cours	se	X	
				Dept	DE	VM	Course #	0	58 No	o. of Ci	redits	4
	Justify upper status & nun	lower division ber of credits:	Equiv	ivalent to DEVM 054 and DEVM 055. It is four credits (4+0).								
	3. PROPOSED	COURSE TITLE:					Math H	Essentia	als			
	4. To be CROS	S LISTED? YES/NO		No	lf ye	es, Dept:			Course #			
	NOTE: Cross- signatures	listing requires appr s.	roval of	f both depar	tments a	nd deans i	nvolved. Ad	d lines a	at end of fo	rm for a	addition	al required
	5. To be STACK	YES/NO		No	lf ye	es, Dept.			Course	e #		
How will the two course levels differ from each other? How will each be taught at the appropriate								1				
	* Use only one Format 1 form for the stacked course (not one for each level of the course!) and attach syllabi. Stacked course applications are reviewed by the (Undergraduate) Curricular Review Committee and by the Graduate Academic and Advising Committee. Creating two different syllabi (undergraduate and graduate versions) will help emphasize the different qualities of what are supposed to be two different courses. The committees will determine: 1) whether the two versions are sufficiently different (i.e. is there undergraduate and graduate level content being offered); 2) are undergraduates being overtaxed?; 3) are graduate students being undertaxed? In this context, the committees are looking out for the interests of the students taking the course. Typically, if either committee has qualmes they both do. More info online – see URL at top of this page.					ourse rising es of what are nt (i.e. is there ts being if either						
T	6. FREQUENCI	OF OFFERING:	Г	Every Semester								
				Fall, Spring, Summer (Every, or Even-numbered Years, or Odd-numbered Years) — or As Demand Warrants				ars) — or As				
	7. SEMESTER & YEAR OF FIRST OFFERING (Effective AY2015-16 if approved by 3/31/2015; otherwise AY2016-17) Spring 2016											
8. COURSE FORMAT: NOTE: Course hours may not be compressed into fewer than three days per credit. Any course compressed into fewer than six wee must be approved by the college or school's curriculum council. Furthermore, any core course compressed to less than six weeks must be approved by the Core Review Committee.				an six weeks six weeks								
	COURSE FOR (check all that a	RMAT: apply)		1	2	3		4	5	x	6 wee semes	eks to full ster
	OTHER FORM	MAT (specify)	In an deliv	ddition to h	being tai	ught over	a full seme	ster, it ie fram	will also b es as dem	e offer and wa	ed for arrants	distance
	Mode of deliv	very (specify	Face	Face to face lecture, asynchronous distance delivery and synchronous distance								
	lecture, field t	trips, labs, etc)	deliv	very		5						

9. CONTACT HOURS PER WEEK: 4 LECTURE LAB PRACTICUM					
hours/weeks hours /week hours /week					
1600 minutes in non-science lab=1 credit. 2400-4800 minutes of practicum=1 credit. 2400-8000 minutes of internship=1 credit.					
This must match with the syllabus. See http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures-/guidelines-					
OTHER HOURS (specify type)					
10. <u>COMPLETE</u> CATALOG DESCRIPTION including dept., number, title, credits, credit distribution, cross-listings and/or					
stacking (50 words or less if possible): Example of a complete description:					
FISH F487 W, O Fisheries Management					
3 Credits Offered Spring					
Theory and practice of fisheries management, with an emphasis on strategies utilized for the management of freshwater and marine fisheries. <i>Prerequisites: COMM F131X or COMM F141X: FNGL F111X: FNGL F211X or</i>					
ENGL F213X; ENGL F414; FISH F425; or permission of instructor. Cross-listed with NRM F487. (3+0)					
DEVM 068 Math Essentials					
4 credits Offered every semester Teaches the concents of basic arithmetic and introductory algebra. Includes operations					
and properties on real numbers: ratio: proportion: percent: scientific notation:					
variation: topics from consumer mathematics: evaluation of literal expressions:					
solution and graphs of linear equations and inequalities: radicals and exponents:					
polynomials: factoring and special products: fundamental operations with algebraic					
fractions; solution of quadratic equations; and elementary systems of equations.					
Geometric formulae are presented on a case-by-case basis as needed. Student success					
strategies and college readiness skills are emphasized. Prerequisites: Appropriate					
placement scores required. (4+0)					
11. COURSE CLASSIFICATIONS: Undergraduate courses only. Consult with CLA Curriculum Council to apply S or H					
H = Humanities S = Social Sciences					
for the baccalaureate core? If YES, attach form.					
IF YES, check which core requirements it could be used to fulfill:					
O = Oral Intensive, Format 6 W = Writing Intensive, Format 7 X = Baccalaureate Core					
11.A Is course content related to northern, arctic or circumpolar studies? If yes, a "snowflake" symbol will be added in the printed Catalog and flagged in Banner.					
VES NO X					
12. COURSE REPEATABILITY:					
Is this course repeatable for credit? YES NO x					
Justification: Indicate why the course can be repeated (for					
example, the course follows a different theme each time).					
How many times may the course be repeated for credit?					
If the course can be repeated for credit, what is the maximum number of credit hours that CREDITS					
If the course can be repeated with variable credit, what is the maximum number of credit CREDITS					
nous diat may be carried for this course:					
13. GRADING SYSTEM: Specify only one. Note: Changing the grading system for a course later on constitutes a Maior					
Course Change - Format 2 form.					
IFTTER PASS/FAIL:					

REST	RESTRICTIONS ON ENROLLMENT (if any)					
14.	4. PREREQUISITES					
	These will be <i>required</i> before the student is allowed to enroll in the course.					
15.	SPECIAL RESTRIC	CTIONS	, CONDITIONS	None		
			There is a	\$25		
	course fee for					
			There is a	fee		
16.	PROPOSED COU	Has a n	to the submittee	ions. d through your dean to the Provost for fee a	pproval? No	
		Theo e h			Yes/No	
17.	PREVIOUS HISTO	DRY				
	Has the course l	been off	ered as special topic.	s or trial course previously?	Yes	
	If yes give seme	ster ve	ar course # etc ·	Eall 2013 Spring 2014 Spring 2015		
	n yes, give seine	ster, yet		DEVM 094 Mathematical Literacy		
18.	ESTIMATED IMPA	CT				
	WHAT IMPACT	, IF ANY	, WILL THIS HAVE (ON BUDGET, FACILITIES/SPACE, FACULTY	, ETC.	
	No impact on I	audaot	facilities / space T	The instructor has developed the class as	part of her workload	
	No impact on i	Juuger,	lacinities / space. 1	the instructor has developed the class as	part of her workload.	
19.	LIBRARY COLLEC	TIONS				
	adequacy of libra	ted the l rv/medi	ibrary collection dev a collections. equipn	elopment officer (kljensen@alaska.edu, 4/4 nent. and services available for the propose	-6695) with regard to the decourse? If so, give date of	
	contact and resol	ution. I	f not, explain why no	ot.		
	No x Yes Library collections are not needed for this course.					
20.	IMPACTS ON PRO	OGRAM	S/DEPTS	tod by this proposed action?		
	Include information	on the F	Programs/Departments	contacted (e.g., email, memo)		
	The Departmen	t of Dev ter whi	velopmental Educa le emphasizing stu	ition will be impacted because this class dent's mathematical understanding, col	will prepare students for lege readiness and	
	conceptual know	vledge.				
21	POSITIVE AND N	ECATIN	E INADACTS			
21.	Please specify po	sitive an	d negative impacts of	on other courses, programs and department	s resulting from the	
-	proposed action.					
	A positive impa	ct for d	epartments is that	students can move through the math se	quence and begin taking	
	core math courses sooner, decreasing time toward graduation.					
	A negative impact is that this is a four-credit class, and students may need to limit the number of other classes that they take concurrently					
	causses that they	une e				
			4			
JUS	STIFICATION FO	DR ACT	TION REQUESTED			
٢	The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new					
0	change. Please address this in your response. This section needs to be self-explanatory. Use as much space as					

This Math Essentials course offers students the opportunity to learn the concepts of Prealgebra and Elementary Algebra in an accelerated format, while focusing on context and critical thinking. This course serves as a mathematical foundation for both STEM and non-STEM students and covers the fundamental topics of developmental mathematics while actively engaging students in problem solving and reasoning

strategies. College readiness and student success strategies are emphasized, including time management,

needed to fully justify the proposed course.

V. hat programs (departments will be affected by this proposed activity include information on the Programs/Departments contacted (e.g., email, memor

The Department of Developmental Education will be impacted because this class will prepare students for core courses faster while emphasizing student's mathematical understanding, college readiness and conceptual knowledge.

21. POSITIVE AND NEGATIVE IMPACTS

Please specify positive and negative impacts on other courses, programs and departments resulting from the proposed action.

A positive impact for departments is that students can move through the math sequence and begin taking core math courses sooner, decreasing time toward graduation.

A negative impact is that this is a four-credit class, and students may need to limit the number of other classes that they take concurrently.

JUSTIFICATION FOR ACTION REQUESTED

The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new course applications to make sure that the quality of UAF education is not low-ered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. Use as much space as needed to folk justifying proposed course.

This Muth Lesentials course offer's students the opportunity to learn the concepts of Presigeirea and Linmentary Algebra in an accelerated format, while focusing on context and critical tunking. This course serves is a mathematical foundation for both STLM and non-STEM students and covery the fundamental topics of developmental mathematics while activity engaging students in problem solving and reasoning.

strategies. College readiness and student success strategies are emphasized, including time management, organization, and study hall its.

UVV has had a similar control since 2007. UVP wants to offer hard-working students opportunity to may into core with course work somer in their abatemic career.

APPROVALS: Add additional signature lines as needed.
Date Date
Signieore, Chair, Program/Department of: 15/2/11
Signature Chair, College School Curriculum Council for JCD ACADENII CELLA
Signature, Dean, College/Senad
Offerings above the level of approved programs must be approved in advance by the Provost.
Date
Signature of Provost fit above level of approved programs)
ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE
Date
Signature: Chair Faculty: Senate Review: CommitteeCurriculum Review:GAAC
Cure ReviewSADAC

RUNILES

ATTACH COMPLETE SYLLABUS (as part of this application). **DEVM 068** Professor Wildfeuer Math Essentials Syllabus Spring 2016 Title: Math Essentials Number: DEVM 068 UI1 CRN XXXXX Credits: 4 credits Prerequisites: Appropriate placement scores. Location: Face to face, synchronous distance, or asynchronous distance Meeting Time: Four hours a week for face to face and synchronous distance. N/A for asynchronous distance. Instructor: Sandra Wildfeuer, sjwildfeuer@alaska.edu Math Tutor: XXX, xxx@alaska.edu Address: Harper Building 101D, 4280 Geist Road, Interior~Alaska Campus, Fairbanks, AK 99709 Office Hours: by appointment 907-474-1931 Phone: FAX: 907-451-4079 (local) or 877-553-9916 (toll free) Textbook: Pathways to Math Literacy by D. Sobecki with 18 Weeks ALEKS Access Card ISBN: 9781259278723 ALEKS Access Card can be purchased from publisher with access to an ebook. Guided Notes, Computer, Internet, Folder or 3 ring binder for Workbook Supplies:

Course Description:

Teaches the concepts of basic arithmetic and introductory algebra. Includes operations and properties on real numbers; ratio; proportion; percent; scientific notation; variation; topics from consumer mathematics; evaluation of literal expressions; solution and graphs of linear equations and inequalities; radicals and exponents; polynomials; factoring and special products; fundamental operations with algebraic fractions; solution of quadratic equations; and elementary systems of equations. Geometric formulae are presented on a case-by-case basis as needed. Student success strategies and college readiness skills are emphasized. *Prerequisites: Appropriate placement scores required.* (4+0)

Course Goals (general):

Students will develop conceptual and procedural tools that support the use of key mathematical concepts in a variety of contexts. Throughout the course, college success content will be integrated with mathematical topics. Math Essentials is a one-semester course integrating numeracy, proportional reasoning, algebraic reasoning, and functions.

- 1. Apply the concepts of numeracy in multiple contexts.
- 2. Recognize proportional relationships and use proportional reasoning to solve problems.
- 3. Use the language of algebra to write relationships involving variables, interpret those relationships, and solve problems.
- 4. Interpret and move flexibly between multiple formats including graphs, tables, equations, and words.
- 5. Demonstrate student success skills including perseverance, time management, and appropriate use of resources.
- 6. Develop the ability to think critically and solve problems in a variety of contexts using the tools of mathematics including technology.

Student Learning Outcomes (more specific):

- 1. Perform basic operations with integers, fractions and decimals.
- 2. Express and simplify numbers in exponential form (whole number exponents).
- 3. Use the order of operations to simplify expressions.
- 4. Convert between fractions, decimals and percents.
- 5. Solve percent problems.
- 6. Solve ratio and proportion problems.
- 7. Simplify and evaluate basic algebraic expressions.
- 8. Identify and solve linear equations involving whole numbers, integers, decimals and fractions.
- 9. Utilize basic properties of geometry involving perimeter, area and circumference.
- 10. Find the mean, median, and mode of a list of numbers.
- 11. Graph integers, fractions and decimals on a number line.
- 12. Read, interpret, and make decisions based upon data from line graphs, bar graphs, and charts.
- 13. Use estimation skills.
- 14. Apply understanding of exponent rules.
- 15. Solve and graph linear inequalities in one variable.
- 16. Graph and interpret linear equations.
- 17. Determine the slope of a line.
- 18. Determine equations of lines.
- 19. Solve a basic system of linear equations.
- 20. Perform operations on polynomials.
- 21. Factor polynomials.
- 22. Solve quadratic equations by factoring.
- 23. Solve applied problems.
 - a. Translate problems from a variety of contexts into a mathematical representation and vice versa.

Student Success and Mathematical Success emphasized:

- Develop written and verbal skills in relation to course content.
- Evaluate personal learning style, strengths, weaknesses, and success strategies that address each.
- Apply time management and goal setting techniques.
- Develop the ability to use mathematical skills in diverse scenarios and contexts.
- · Use technology appropriately including calculators and computers.
- Demonstrate critical thinking by analyzing ideas, patterns, and principles.
- Demonstrate flexibility with mathematics through various contexts, modes of technology, and presentations of information (tables, graphs, words, equations).

Time Commitment:

This is a FOUR credit class that meets for four hours per week. University policy says that it is understood that an average student will be expected to spend *eight* hours per week of study and preparation outside of class in order to meet the learning objectives for the units of credit in lecture. You should set your sights higher than "average student, average grade", so expect to spend more than eight hours a week outside of class time to be successful. It will take a large amount of your time and focus to do well in this class and to meet with the tutor, as you need to memorize techniques (how) as well as understand concepts in depth (why), and the course moves at a rapid pace. Instructional Methods:

Instructional Methods	Face to Face	Distance synchronous	Distance asynchronous
Meeting Times	Twice a week in a classroom = 4 hours	Twice a week in a web meeting = 4 hours	Office hours with instructor
Audio Call in		Phone number and pin code for class: 1-866-832-7806 pin #XXXXXXX. Phone line is always open. Call in if internet problems to join class on time, and not miss anything.	
Blackboard (Find student grades, announcements, course documents, quizzes, math help resources, video explanations, and course schedule.)	Main internet site	Main internet site Access the Collaborate virtual classroom.	Main internet site Access Collaborate virtual classroom
Lecture	Face to face in a classroom	In a virtual classroom with a community of students. Each class session is recorded (names are anonymous). PDFs of the whiteboard slides with the lecture notes on them after class are posted as a resource.	Recorded lectures (video, screencasts, Collaborate). PDFs of the whiteboard slides used while making the videos with lecture notes on them are posted as a resource.
Interactive Activity	Complete Guided Student Notes	Complete Guided Student Notes	Complete Guided Student Notes
Homework	ALEKS or other homework	ALEKS or other homework	ALEKS or other homework
Quizzes	Given in class and as take home quiz. Complete by hand.	Complete by hand and scan or fax to turn in.	Complete by hand and scan or fax to turn in.
Exams	Given and taken in class.	Proctored and completed by hand.	Proctored and completed by hand.
4 hours of in class instructional time	Join class, and watch, listen and participate in whole class, individual, and small group activities. Fill in the Guided Student Notes. Take quizzes and exams.	Join the Collaborate classroom and watch, listen and participate in whole class, individual, and small group activities. Fill in the Guided Student Notes.	Watch recorded lectures and fill in Guided Student Notes. Complete supplemental activities each week, including interactive online practice and readings.
8 hours of outside of class instructional time Communication	ALEKS Homework Fill in any gaps in the Guided Notes. Study for quizzes and exams. Meet with math tutor. Face to face during	ALEKS Homework Fill in any gaps in the Guided Notes. Study for quizzes and exams. Complete quizzes. Scan or fax quizzes. Make arrangements with proctor. Take exams. Meet with math tutor. Email, phone, and tutoring	ALEKS Homework Fill in any gaps in the Guided Notes. Study for quizzes and exams. Complete quizzes. Scan or fax quizzes. Make arrangements with proctor. Take exams. Meet with math tutor. Email, phone, and tutoring
between instructor	class or office hours.	via Collaborate.	via Collaborate.

and student	Check your @alaska.edu address on a regular basis, or forward it to the one you prefer.	Check your @alaska.edu address on a regular basis, or forward it to the one you prefer.	Check your @alaska.edu address on a regular basis, or forward it to the one you prefer.
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Course Policies:

University of Alaska Board of Regents have clearly stated in BOR Policy that discrimination, harassment and violence
will not be tolerated on any campus of the University of Alaska. If you believe you are experiencing discrimination or
any form of harassment including sexual harassment/misconduct/assault, you are encouraged to report that behavior.
If you disclose sexual harassment or sexual violence to a faculty member or any university employee, they must notify
the UAF Title IX Coordinator about the basic facts of the incident.

Your choices for disclosure include:

- 1) You may confidentially disclose and access confidential counseling by contacting the UAF Health & Counseling Center at 474-7043;
- 2) You may access support and file a Title IX report by contacting the UAF Title IX Coordinator at 474-6600;
- 3) You may file a criminal complaint by contacting the University Police Department at 474-7721.
- Academic Honesty Students will be required to conduct themselves honestly and responsibly, and will be expected to respect the rights of others.
- UAF students are subject to the Student Code of Conduct. In accordance with board of regents' policy 09.02.01, UAF will maintain an academic environment in which freedom to teach, conduct research, learn and administer the university is protected. See the full document at: <u>http://www.uaf.edu/catalog/catalog_10-11/pdf/04_Academics.pdf</u>
- Incomplete (I) grades will only be given in Mathematics courses in cases where the student has completed the
 majority (normally all but the last three weeks) of a course with a grade of C or better, but for personal reasons
 beyond his/her control has been unable to complete the course during the regular term. Negligence or indifference are
 not acceptable reasons for the granting of an incomplete grade. It is much harder to finish the class on your own than
 it is to put in the extra time to succeed during the semester.
- Exams taken outside of class must be proctored. Proctors must be education officials at a university, community college or an administrator at a public school site or library, other governmental or community officials, or, if such persons are unavailable, other people approved in advance by contacting Sandra Wildfeuer at 907-750-0439 or by sending an email to <u>sjwildfeuer@alaska.edu</u>. Relatives and/or friends cannot be proctors.
 Proctor responsibilities include:
 - o security of examination until the students presence at the beginning of the exam session;
 - o identification of the student by photo I.D. (or other verification, if necessary);
 - provision of a quiet, well-lighted area as free from noise and distraction as possible and within supervisory distance of the proctor;
 - verification of instructional materials (if any) allowed during the exam process;
 - return of all papers, including scratch sheets, and examination questions to <u>sjwildfeuer@alaska.edu</u>. (Note: photocopying or taking notes from any examination paper is not permitted);
 - termination of the examination, confiscation of exam materials, and immediate notification of Sandra Wildfeuer by telephone if there is improper conduct on the part of the student or any evidence that there has been a violation of the examination process.
- Mid-term and Final Grades are posted in UAOnline. Current grades are posted in Blackboard.

Course Policies	Face to Face	Distance synchronous	Distance asynchronous
Participation	Attend ALL class meetings. You are responsible for all material covered in class, even if you are absent.	Attend ALL class meetings. If you miss class, you are expected to watch the Collaborate recording before the next class meeting. This way you will be connected with the class. We will have ongoing discussions and when you miss part of it you are missing important material.	Login to Blackboard and check @alaska.edu email on a regular basis to check for announcements and progress on assignments.
Homework	Complete in a timely manner.	Complete in a timely manner.	Complete in a timely manner.
Quizzes: frequent quizzes for formative assessment of student learning.	Given in class and as take home quiz to complete by hand. Some quizzes may be given online. Complete in a timely manner.	Print quizzes and complete them by hand, in a timely manner (ideally within 48 hours after we discuss the content in class). Scan or fax the guizzes to turn them in	Print quizzes and complete them by hand, in a timely manner. Scan or fax the quizzes to turn them in.
Exams	As a policy, exams cannot be retaken. Exams cannot be missed except in extreme cases. If an excuse for an exam can be scheduled ahead of time, it must be scheduled in advance. The instructor reserves the right to offer retesting opportunities.	Find a proctor to give the exam and to return the exam to the instructor.	Find a proctor to give the exam and to return the exam to the instructor.
Corrections to Quizzes and Exams	Make corrections to quizzes and midterm exams to earn back half the points missed. Copy the problem, solve it correctly, and write a sentence stating the initial error.	Make corrections to quizzes and midterm exams to earn back half the points missed. Copy the problem, solve it correctly, and write a sentence stating the initial error.	Make corrections to quizzes and midterm exams to earn back half the points missed. Copy the problem, solve it correctly, and write a sentence stating the initial error.
Final Comprehensive Exam	Attend and take final exam during scheduled day and time.	Find a proctor to give the exam and to return the exam to the instructor.	Find a proctor to give the exam and to return the exam to the instructor.
Faculty Initiated Withdrawals for Nonparticipation	If you have not taken Exam One and made corrections to it by the Withdrawal date you may be withdrawn.	If you have not taken Exam One and made corrections to it by the Withdrawal date you may be withdrawn.	If you have not taken Exam One and made corrections to it by the Withdrawal date you may be withdrawn.

Evaluation. Your grade in this course will depend upon the following:

Evaluation	Face to Face	Distance synchronous	Distance asynchronous
Participation	5% Includes coming to class, participating in hands on learning activities individually, in groups, and with the whole class. Complete Guided Student Notes.	5% Includes coming to class, participating in hands on learning activities individually, in groups, and with the whole class. Complete Guided Student Notes.	5% Includes participating in hands on learning activities online, readings, and posting in a discussion group. Complete Guided Student Notes.
Homework ***ALEKS is a web- based, artificially intelligent assessment and learning system.	15% Online and handwritten homework	15% Online and handwritten homework	15% Online homework.
Quizzes Frequent quizzes for formative assessment of student learning	20% Given in class and as take home quiz to complete by hand. Some quizzes may be given online.	20% Given online or completed by hand. Scan or fax to turn in.	20% Given online or completed by hand. Scan or fax to turn in.
Midterm Exams (45% = 3 exams @ 15% each) • It will be important to show work, since the method of solution is just as important as the final answer.	45% Given in class or proctored. Exam is handwritten, with closed book and no notes.	45% Proctored, handwritten, and closed book with no notes.	45% Proctored, handwritten, and closed book with no notes.
 Final Comprehensive Exam Students are expected to demonstrate that they have mastered the student learning outcomes. 	15% Given in class or proctored. Exam is handwritten, with closed book and no notes.	15% Proctored, handwritten, and closed book with no notes.	15% Proctored, handwritten, and closed book with no notes.
Total	100%	100%	100%

Grading Scale:

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А	90-100%
В	80-89%
С	70-79%
D	60-69%
F	0-59%

ALEKS Homework, Registration and Assessment Information:

ALEKS uses adaptive questioning to quickly and accurately determine exactly what you know and don't know in the course, and then provides instruction on the topics you are most ready to learn. When you use ALEKS, you complete only the learning tasks that you need and not those somebody else needs. Students who show a high level of mastery in ALEKS will gain the foundation needed to be successful in the overall course.

Each of you will have a password-protected student account in ALEKS. Since all records of your work are kept on the ALEKS servers, you can access your account from any computer connected to the Internet.

In this course, you will be required to use ALEKS to help you master course content. Your work in ALEKS will constitute a significant part of your final grade in the course, so be sure to start ALEKS early in the term. ALEKS is very unfriendly to procrastinators; don't wait until the last minute to finish an ALEKS assignment as an automated progress assessment may interrupt your timing.

ALEKS Registration: Before starting ALEKS, you must first register into our ALEKS course.

- 1. Go to www.aleks.com
- 2. Click on the link marked "New User? Sign Up Now!" in the upper left corner of the page.
- 3. Under "Using ALEKS with a Class," enter the 10-character course code given below into the boxes provided, and click on "Continue." Course Code: E93T6-EPHMY
- 4. Verify the course information and click on "Continue."
- 5. Enter the ALEKS access code you purchased in the bookstore, or purchase online by clicking on the "purchase an access code online" link and follow the instructions.
- 6. Answer the questions on the "Personal Information" page to complete your registration.
- 7. During the registration process, you will be given a login name and password. You will have the opportunity to change your password if you wish. Write down your login name and password, and keep them in a safe place. You will need them to access your ALEKS account in the future.
- 8. If you do not have a current ALEKS plug-in, one will be installed automatically at this time. The plug-in is a small software component needed by ALEKS and provided free of charge to all ALEKS users. Normally, installation is fully automatic and requires only a minute or so. If you experience any difficulty with installation, please contact ALEKS Customer Support at http://support.aleks.com. When the installation is complete, please be sure to close all of your browser windows to restart your browser.
- 9. Go to www.aleks.com and enter your ALEKS login name and password in the Registered Users area and click on "LOGIN." You will now be in your ALEKS student account.

ALEKS Tutorial: After Registration you will take a brief Tutorial, or introduction to the ALEKS interface. It shows you how to enter the various kinds of answers that you may be asked to provide in ALEKS.

ALEKS Initial Assessment: Following the Tutorial, you will be assessed to determine the correct starting point for your work in the course. Do the initial assessment carefully and honestly. If you do this assessment carelessly or answer randomly, you'll waste time later because ALEKS will force you to work through material you already know and don't really need to review. Also, there is no advantage to consulting outside resources to improve your assessment score. Doing so, will not only make the assessment longer, but when you enter the Learning Mode, ALEKS will try to teach you things that you are not really ready to learn. The periodic progress assessments will discover this, and you'll spend even more time in Learning Mode to reach your correct learning state.

ALEKS Automatic Assessments: There is no partial credit on assessments; take the time to be sure that you have entered your answer correctly. Enter only the final answer and have a pencil and scratch paper ready to use. NEVER click the "I don't know" button during any ALEKS assessment unless you really don't have any idea of how to solve the problem. Otherwise, ALEKS will think that you not only don't know how to solve that specific problem, but also other related problems. As you make progress in ALEKS, you will be automatically reassessed at regular intervals to check retention and provide review as needed. If the reassessment comes at a time when you cannot concentrate, log off and return later. You can also interrupt your assessment mid-way if you become tired, and return to complete it later.

You may lose material from your pie on automatic reassessments; this is completely normal. The loss of material is based on the answers you gave on the assessment. ALEKS uses the assessments to update your pie and provide needed review.

ALEKS Pie Chart: The results of your assessment are shown in a color-keyed pie chart. The pie chart represents the course curriculum; each slice of the pie chart represents a part of the curriculum and is filled in with solid color to reflect your current course mastery. Your goal is to fill in the slices of the pie chart by demonstrating your mastery of the course curriculum. If you move your mouse pointer around the slices, they will pop out and display lists of topics that you are currently ready to learn. Click on any one of these topics to begin working in the Learning Mode.

ALEKS Learning Mode: Most of your time in ALEKS will be spent in Learning Mode, working practice problems. ALEKS can provide a nearly unlimited variety of practice problems since they are algorithmically generated and do not rely on a question/answer bank that you can cycle through. In most cases, you will solve only a few problems per topic in order to establish your grasp of the concept. Every time you do a problem, ALEKS will give you immediate feedback on your answer. Note that if you make mistakes, ALEKS requires a little extra practice, but it doesn't start you over; you always get credit for the problems that you have answered correctly.

ALEKS Times Out and Saves Work: ALEKS will automatically terminate your session after 30 minutes of inactivity. There is no warning message before the session is terminated. Simply log back on and ALEKS will bring you back to exactly where you left off.

Support Services

- IAC Math Tutor available for one to one and small group tutoring.
- UAF MATH HOTLINE Sunday Thursday 5 10 pm 866-823-6284 (866-UAF-Math) The MATH HOTLINE offers LIVE, toll-free telephone math tutoring for any UAF student taking math courses by distance (audio-conferenced, web-based,etc.). The HOTLINE is staffed by knowledgeable, helpful, personable tutors who are standing by to assist students with their math courses.
- Please contact ALEKS Customer Support at http://support.aleks.com if you have questions or registration/system issues with ALEKS at any point during the term.

Disability Services

- The Office of Disability Services implements the Americans with Disabilities Act (ADA), and insures that UAF students have equal access to the campus and course materials. Students with documented disabilities who may need reasonable academic accommodations should discuss these with me during the first two weeks of class.
- Contact UAF Disability Services (<u>http://www.uaf.edu/disability/</u>) by email at <u>uaf-disabilityservices@alaska.edu</u>, by phone at (907)474-5655, or by TTY at (907)474-1827.

Important Dates

First Day of Instruction/Late Registration Begins	. Thursday, January 14, 2016
Alaska Civil Rights Day (No Classes)	. Monday, January 18, 2016
Deadline for adding classes, late registration and fee payment; 5 p.r	n. in person, midnight at UAOnline
	Friday, January 22, 2016
Deadline for 100% Refund of Tuition and UA Fees	. Friday, January 29, 2016
Deadline for Student-Initiated/Faculty Initiated Drops	. Friday, January 29, 2016
Course Does Not Appear on Academic Record	
Spring Break (No Classes)	. Monday - Friday, March 14-18, 2016
University Holiday (Most Offices Closed)	Friday, March 18, 2016
Last Day for Student/Faculty Withdrawal,	Friday, March 25, 2016
W appears on Academic Record.	
Last Day of Instruction	Monday, May 2, 2016
Final Exams	Tuesday – Friday, May 3 – 6, 2016
Faculty Deadline to Post Grades	. Noon, Wednesday, May 11, 2016

Course Calendar:

Tuesday	Thursday
Math Essentials	Day 1 Jan 14
	Operations on Whole Numbers
Day 2 Jan 19	Dav 3 Jan 21
Reading Pie Charts	Operations on Fractions
Operations on Fractions	Operations on Decimals
Lesson 1-1: Where Does the Time Go? (Percentages and Pie Charts)	
Day 4 Jan 26	Day 5 Jan 28
Reading Bar Graphs	Operations on Integers
Estimation	Percents
Lesson 1-2: It's All About Style (Interpreting and Drawing Bar Graphs)	Lesson 1-4: Take a Guess! (Estimation and Number Sense)
Lesson 1-3: What's Your Type? (Learning Styles with Venn Diagrams)	Lesson 1-5: Do You Have Anything to Add? (Using Addition and Subtraction Skills)
Day 6 Feb 2	Day 7 Feb 4
Percent Equation	Order of Operations
Perimeter and Area	Compare Linear and Exponential Growth
Lesson 1-6: It's About Accumulation (Using Multiplication and Division Skills)	Lesson 1-7: Avoiding Empty Pockets (Using Exponents and Order of Operations)
Day 8 Feb 9	Day 9 Feb 11
Exponents	Unit Conversions
Square Roots, Cube Roots	Mean, Median and Mode
Lesson 1-8: Follow the Pattern (Comparing Linear and Exponential Growth)	Lesson 1-9: Survival Skills (Understanding and Converting Units)
	Lesson 1-10: Did You Pass the Test? (Using Measures of Average)
Day 10 Feb 16	Day 11 Feb 18
Introduction to Solving Equations	Solving Equations
	Lesson 2-2: Of Planes, Boats, Doll Houses, and Dr. Evil (Dimensional Analysis)
Day 12 Feb 23	Day 13 Feb 25
Solving Equations	Unit Rates, Dimensional Analysis
Lesson 2-3: 88 Miles Per Hour! (Rates of Change)	Relative Difference
	Lesson 2-4: It's All Relative (Interpreting Relative Difference/Relative Error)
Day 14 Mar 1	Day 15 Mar 3
Percent Change	Inputs and Outputs of Functions
Perimeter and Area	Order of Operations
	Lesson 2-5: Ins and Outs (Inputs, Outputs, and Writing Applied Expressions)
Day 16 Mar 8	Day 17 Mar 10
Distribution Property	Solving Linear Equations
Problem Solving	Solving Linear Inequalities
Inductive and Deductive Reasoning	
Lesson 2-6: Oh Yeah? Prove It! (Inductive and Deductive Reasoning)	Lesson 2-8: Indecision May or May Not Be My Problem (Algebraic Expressions in Decision Making)
Lesson 2-7: What's Your Problem? (Polya's Problem Solving Procedure)	
Day 18 Mar 22	Day 19 Mar 24
Solving Linear Inequalities	Intro to Rectangular Coordinate System

Problem Solving	Plotting Points	
Lesson 2-9: All Things Being Equal (Solving Equations and Inequalities)	Graphing Lines	
	Lesson 3-1: A Coordinated Effort (The Basics of Graphing)	
Day 20 Mar 29	Day 21 Mar 31	
Graphing Lines	Graphing Lines	
x-intercept, y-intercept, slope	x-intercept, y-intercept, slope	
Lesson 3-2: Cabbing It (Slope and Rate of Change)	Lesson 3-3: Planning a Pizza Bash (The Connection Between Graphs and Equations)	
Day 22 Apr 5	Day 23 Apr 7	
Introduction to Factoring	Factoring	
Graphing Lines by finding Intercepts	Polynomial Expressions -Distribute, Multiply, and Add Like terms	
Slope-Intercept Equation	Find the Equation of a Line	
Lesson 3-5: The Effects of Alcohol (Writing Linear Equations Based on Data)	Lesson 4-7: Minding Your Business (Add, Subtract, and Multiply Expressions)	
Day 24 Apr 12	Day 25 Apr 14	
Factoring and Multiplying Polynomials	Exponent Rules	
Finding the Equation of a Line	Applications of Linear Thinking	
Applications of Linear Thinking	Introduction to Systems of Equations	
	Lesson 3-7: If You Got a Problem, Yo I'll Solve It (Solving Problems with Linear Equations and Systems)	
Day 26 Apr 19	Day 27 Apr 21	
Exponent Rules	Exponent Rules	
Solving Quadratic Equations by Factoring	Solving Quadratic Equations by Factoring	
Lesson 4-3: Irate Ducks (Graphs of Quadratic Equations)	Systems of Equations	
Lesson 4-8: The F Word (Factoring and Function Notation)	Lesson 4-9: GoingGoingGONE! (The Quadratic Formula and Max/Min)	
Day 28 Apr 26	Day 29 Apr 28	
Exponent Rules	Review for Final Exam	
Solving Quadratic Equations by Factoring		
N	lay 3-6	
Final Exam		