UAF DMS Guidelines for

MATH 151X –College Algebra for Calculus

Across all sections of Math 151X offered by UAF campuses (delivered in person or online), all syllabi must minimally satisfy the following requirements.
Note: This course meets 1 hour per day 3 days a week and 1.5 hours for 1 day (or should be set up for equivalent "class" time).
1. General guidelines set by UAF; follow this link to the UAF syllabus requirements
2. GER Information (sample statement below):
This course is listed as a General Education Math Course as such this course is expected to meet the 4

- Homework
  - – for online work through HAWKES, mastery level should be no less than 75%
  - – instructors should provide written feedback to students approximately weekly throughout the semester; this can be through humanly-graded assignments or email correspondence
- Exams
  - – at least two exams during the semester
  - – exams must be timed, closed book, closed notes
  - – exams should have some form of proctoring
  - – use of non-graphing calculators are allowed in this course but not for Chapters 1-4
  - – exams must be majority written answer (not multiple choice)
  - – exams must be paper-and-pencil exams, written and graded by faculty members
  - – exams should not be reused from previous semesters, limited reuse of edited problems is acceptable
- Final Exam
  - – must be cumulative and representative of the entire course
  - – must include problems from each Assessment Criteria listed on the next page
  - – Students are expected to know on their own (no formulas provided on the test for the following):
    - equation of lines formulas
    - quadratic formula
    - exponential and logarithmic properties
    - simple and compound interest formulas

7. Assessment Criteria

Final exams should contain problems that demonstrate the students' acquired knowledge of the following topics.

- Fundamentals- Algebra
  - – simplify algebraic expressions involving negative and fractional exponents, compound fractions, and rational expressions
  - – solve a problem using modeling with equations q3ir0 p6@11A2 792 reW*nBT/F1 9.96 Tf1 /.02 Tm06 Tf1 0 0 1 72.02

- – identify the equation from a graph
- – graph a rational function by identifying intercepts and asymptotes

• Exponential Functions
- – graph a transformed exponential function
- – identify the equation of a graph of an exponential function

• Logarithmic Functions
- – graph a transformed logarithmic function
- – use laws of logarithms to evaluate, combine or expand logarithmic expressions

• Exponential and Logarithmic Equations
- – Solve various types of exponential and logarithmic equations algebraically
- – modeling with exponential functions

8. Grading Policy

• The syllabus must include a grading scale of [illegible] must be stated.
• Plus/minus grading is at the discretion of the instructor, but must be stated explicitly.
• Withdrawal and Incomplete policies must be stated explicitly.