Essential Information

Course main website:	olhasus.github.io/MATH-F156X-F01-/
Instructor Information:	
Name:	Olha Sus
Email:	osus@alaska.edu
Office:	Chapman 210C
Office hours:	Tuesday (11:00 AM - 12:00 PM), Thursday (1:00 PM - 2:00 PM) *(for more information see the course main website)*
Appointments:	Email your instructor in advance to make an appointment

Class Time

This is a 4 credit synchronous course that will be held in-person at Chapman building, room #104. There are four hours of class meetings every week, one hour class on MWF and Thursday. Classes will include traditional lectures as well as group work, solving problems work, and short (15min) quizzes work. There will be videos available to watch outside of class (HAWKES learning platform).

Tentative Schedule

The course website contains a schedule for the semester listing the topics to be covered each class, the dates each assignment is due. You should consult this schedule routinely. Any minor adjustments to the schedule will be announced in advance.

Office Hours and Communication

Instructors will schedule formal office hours, which will be listed on the course webpage.

Class announcements will be made using Blackboard. Instructors will contact students via their UAF email address so it will be important to **check this account regularly**.

Online Course Materials

Most course materials (syllabus, schedule, quiz / assessment blank files and solutions), study materials (daily worksheets / written homework and its solutions), will be posted on the course main website. Certain course materials, namely **grades**, will be available only on Blackboard, which you can access also via the main course website.

Course Description & Materials

We will be studying various classes of functions and explore the numerical, algebraic and graphical aspects of them. Function classes include polynomial, rational, exponential, logarithmic, and trigonometric. Skills and concepts needed for Calculus are emphasized. **Note:** Credit cannot be earned for both MATH 156X and MATH F151/152X. **Prerequisites:** Placement into Math 156X by the UAF Math Placement or by permission of instructor.

Precalculus with Integrated Review by Sisson; ISBN-13: 9781642770636 (the actual text is optional but you will need HAWKES access to have access to tutorials through the videos, homework and practice. The Hawkes access comes with access to the eBook).

HAWKES Access - You will be doing a significant portion of your practice and homework on-

line. To do this you must have a HAWKES access code. If you purchase your textbook from the UAF bookstore this code will come packaged with your text. If not, you can purchase one on *learn.hawkeslearning.com* (Purchasing through HAWKES will save you about $10-$15). If you have not yet purchased a code, do not fret! The first 20 days of the course, you will have temporary access to HAWKES so that you can work on your assignments and not fall behind. To access HAWKES, you can use any of the links in blackboard.

Learning in the time of COVID

We recognize that this semester is unlike any semester in the last 100 years. Frequent bi-directional communication will be the key to our joint success.

- If some way the class is set up isn't working for you, please let your instructor know!
- If something goes sideways for you, please email or call your instructor and we can sort out how to help.
- If you get sick and can't finish something, let your instructor know as soon as possible and we'll see what we can work out.
- If you need someone to talk to about non-mathematical questions, Student Mental Health Services offers folks to talk to, with free options. In particular, they offer **Telehealth check-ins** "for times when you feel you could use a little support, want to learn about skills you can use to maintain or improve your mental health, or you aren't sure if you're coping well and could use a professional perspective". Call 907-474-7043 to schedule.

Techonological Requirements

Students will be expected to be able to navigate Blackboard, use links, log into sites and be able to navigate those sites.

Students will be expected to be able to navigate the course main website.

Calculator Policy

This course tests students basic mathematical skills along with the progressive skills needed for Calculus. Students should get into the habit of simplifying answers and writing out exact solutions. This means that while working in HAWKES though there are some problems that may require the use of a calculator, students should get into the habit of writing out exact solutions and using the calculator only when asked to round an answer or to get approximate answers for complicated expressions. On the written assignments students will be expected to give exact answers (portions of the trigonometry section are the only ones you will actually need (and be allowed to use) a calculator). On assessments, students should NOT expect to utilize a calculator. Please note that this means on many assessments students should be able to add, subtract, multiply, divide, root and exponentiate values by hand.

Student Learning Outcomes

- Simplify algebraic and transcendental expressions
- Apply various techniques to rewrite algebraic expressions and solve algebraic equations
- Apply various techniques to rewrite transcendental expressions and solve transcendental equations
- Differentiate between various methods and use them to solve equations
- Analyze and interpret inequalities

- Analyze and interpret graphs of various functions
- Identify different representations of functions and translate one representation into another
- Apply both the unit circle and triangle definitions in order to evaluate trigonometric expressions and functions
- Use the mathematical methods discussed in this course to set up and solve applied problems
- Write solutions using correct mathematical notation
- Explain mathematics quantitatively and conceptually
- Prepare and submit neatly organized written mathematical justifications of your work.

GER Information

This course is listed as a General Education Math Course as such you will be expected to meet the general learning outcomes 1 and 2. You will be asked to complete a GER assignment in compliance with assessment of these outcomes.

1. Build knowledge of human institutions, sociocultural processes, and the physical and natural works through the study of mathematics. Competence will be demonstrated for the foundational information in each subject area, its context and significance, and the methods used in advancing each.
2. Develop intellectual and practical skills across the curriculum, including inquiry and analysis, critical and creative thinking, problem solving, written and oral communication, information literacy, technological competence, and collaborative learning. Proficiency will be demonstrated across the curriculum through critical analysis of proffered information, well-reasoned solutions to problems or inferences drawn from evidence, effective written and oral communication, and satisfactory outcomes of group projects.

Evaluation and Grades

Grades are determined as follows. (Each component of the grade is discussed below.)

HAWKES Lessons	20%
Quizzes	10%
Written Homework	15%
Assessments	40%
Final Exam	15%
total	100%

Letter grades will be assigned according to the following scale. This scale is a guarantee; the instructors reserve the right to lower the thresholds.

A+	97–100%	C+	70–79%
A	94–96%	C	70–76%
A-	90–93%	D	60–69%
B+	87–89%	F	below 60%
B	84–86%		
B-	80-83%		

HAWKES Lessons

Each lesson in this course will consist of reading, watching, and practicing the concepts, then assessment on that material. After reading, watching and practicing the material, you will be expected to show mastery of 90% of the lesson material. Each week you will be asked to certify on the sections to be covered that week. You will have multiple attempts to reach certification. If you do not reach the certification level you will be required to go back to relearn some concepts before you can try to recertify. While working through the lessons it would benefit you to take notes and keep these organized. This will help you in reviewing material and in preparing for the exams. As

you work through the lessons, ask questions. If you do not understand something, ask. If you are not sure that you are going in the right direction, ask. There are many resources available to help you in understanding the material.

The lesson certifications are in HAWKES. At the end of each week, you will receive a participation score based on the number of certifications assigned that week versus the number completed. If you miss a certification deadline, you can still complete these for credit. Certifications submitted up to 24 hours late will receive a 10% deduction, 24-48 hours late will receive a 20% deduction, those submitted 48-72 hours late will receive a 40% deduction, and those submitted more than 72 hours late will receive a 50% deduction.

Quizzes

There will be a 15 minutes quiz held weekly on Thursday. The quiz will cover the material taught in the classes held since the previous quiz; specific topics can be found in the schedule on the course website. The quiz will be primarily held to help you to understand and learn the material better. There will be practical problems to solve and some theoretical questions to answer. **Quizzes are closed book, closed notes and online resources are not allowed.**

Quizzes guidelines.

Your grade on the quiz will be based not only on the answer to the problems but also on the following criteria:

- Your work is clear (work is not blurry or too light to be read); the pages are in the correct order.
- Your name and your instructor's name are on the actual work being submitted.
- Work is neat; it is presented in a way that can be easily read (no lines through work or scratched out places, no notes or comments in margins). You should be submitting a polished, final copy of your work.
- Solutions are written as mathematical sentences or paragraphs- this means that the work is not only mathematically logical but the notation and progression of steps is clear and mathematically concise.
- Each problem should have a beginning (what is the problem asking for or what are you trying to solve), a middle (your supporting steps if you want partial credit) and an end (some statement of the solution). There should be no run-on sentences (no strings of equal signs or arrows).
- Work should be concise with only necessary steps vertically laid out including enough steps to show the thought process throughout the solution. This means that you are very likely going to have to write out problems on separate paper first then transfer it to the final copy.
- Mathematical notation is correct (functions should be labeled, points should be written as ordered pairs, lines are written as equations, etc., unless otherwise stated).
- Solutions are completely worked out meaning there is supporting work not just an answer.
- Answers are completely simplified algebraically (all roots are simplified or rationalized, all fractions reduced, answers have only positive exponents, etc., unless otherwise stated).
- Solutions are given as exact answers (not decimal approximations) unless indicated, and answers have correct units where necessary. You should not be using a calculator unless the problems specifically asks for you to use one.

Participation (Daily Worksheets)

Most classes will have some form of group / individual work that includes a short daily worksheet. Participating on the worksheet is a key part of learning the course material. Daily worksheets will not be collected or graded.

Written Homework

Each week there will be a selection of problems to write up by hand and submit. The point of this exercise is to practice presenting your solution to a human being. You want your solution to be clearly presented, neatly written, and easy to read. Each problem will be graded out of 6 points, with 3 points for presentation and just 3 point for correctness.

The submission deadline will be each Monday (except dates: 08/23, 11/29), after the class time (12:45 PM).

Assessments

For each of the modules, students will be required to take a mastery assessment to show that they have mastered the content within that module. For each mastery assessment, students will be given one hour class time to complete it. Assessments dates are posted on the Weekly Schedule. **Assessments are closed book, closed notes and online resources are not allowed.** If you are not able to take an assessment on the scheduled day due to a university sponsored event, you need to make arrangements **at least two weeks in advance** to take the assessment at a different time. You will need written verification of the University/School sponsored event. Do not wait until the week of the assessment to ask for an adjustment as it will not be granted. **There is no extension on assessments.**

Final Exam

The comprehensive final exam for this course will take place on **Tuesday, December 7 (10:15 AM-12:15 PM)**. This is a timed, proctored exam which will be held at Chapman Building, room #104. **Students should make note that final exams cannot be taken early.** If a student needs to take the final at a later date, they will need to have at least a C or better in the course and must provide documentation of extenuating circumstances beyond their control preventing them from taking the final at the indicated time. In such cases, the student will receive an incomplete and arrangements will be made for when to take the final exam. **The Final Exam can not be retaken**.

Extra Credit

There are few opportunities for extra credit in this course. There are assignments in HAWKES (labeled BONUS) that will earn you some extra credit at the end of the semester. These assignments can help you review for assessments or help you to determine any areas for which you may need more practice.

Tutoring and Resources

Free tutoring is available Monday - Saturday! This service is available to any UAF student registered in a MATH or STAT course. You can visit a Math & Stat Tutoring Lab website for getting more information: https://www.uaf.edu/dms/mathlab/math-and-stat-lab/. Also, use the following tutoring link https://fairbanks.go-redrock.com/.

If you have issues with or questions about tutoring, please contact uafmathstatlab@gmail.com.

Additional Support

I am here to help you succeed, however if you do not ask questions and do not seek assistance you

will not do well in this course. Students can contact me through email osus@alaska.edu.

Rules and Policies

Participation and Attendance

Class attendance is expected. Students who stop participating in the course may be withdrawn. If you have technological limitations to participating in class you need to email/call your instructor to sort things out as soon as you can. Examples of inadequate participation include, but are not limited to:

- not completing or not turning in multiple homework assignments
- failing to participate in classroom activities
- repeatedly failing tests and quizzes with no attempt at remediation

Disability 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. The instructors will work with the Office of Disability Services (208 Whitaker, 474-5655) to provide reasonable accommodations to students with disabilities.

Student Protections and Services

Every qualified student is welcome in our classes. As needed, we are happy to work with you, Disability Services, Military and Veteran Services, Rural Student Services, etc. to find reasonable accommodations. Students at this university are protected against sexual harassment and discrimination (Title IX), and minors have additional protections. *As required,* if we notice or are informed of *certain types* of misconduct, then we are required to report it to the appropriate authorities. For more information on your rights as a student and the resources available to you, please go to the following site: www.uaf.edu/handbook.

COVID-19

Students should keep up-to-date on the university's policies, practices, and mandates related to COVID-19 by regularly checking this website:

https://sites.google.com/alaska.edu/coronavirus/uaf/uaf-students.

Further, students are expected to *adhere* to the university's policies, practices, and mandates and are subject to disciplinary actions if they do not comply.

Incomplete Grade

Incomplete (I) will only be given in DMS 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. If you have issues (e.g., with COVID), please communicate early and often with your instructor.

Late Withdrawals

A withdrawal after the deadline (currently 9 weeks into the semester) from a DMS course will normally be granted only in cases where the student is performing satisfactorily (i.e., C or better) in a course, but has exceptional reasons, beyond his/her control, for being unable to complete the

course. These exceptional reasons should be detailed in writing to the instructor, department head and dean.

Academic Dishonesty

Academic dishonesty, including cheating and plagiarism, will not be tolerated. It is a violation of the Student Code of Conduct and will be punished according to UAF procedures.