Essential Information

Website:	olhasus.github.io/MATH-F156X-FXA-/
Instructor Information:	
Name:	Olha Sus
Email:	osus@alaska.edu
Office:	Chapman 210C
Office hours:	scheduled Zoom office hours (see course website)
Appointments:	Email your instructor to make an appointment

Class Time

This is a 4 credit WEB synchronous course. There are eight hours of class meetings every week, two hours on MTWR. Classes will meet over Zoom. Classes will include some traditional lectures as well as group work, with videos 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

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

We will use Campuswire for text-based questions, answers, and precalculus-based chat. Sign up with the link on the Precalculus website. We will use the Blackboard for announcements.

Online Course Materials

Most course materials (e.g., syllabus, schedule, worksheet/assessment solutions, study materials (daily worksheets and solutions), etc.) will be posted on the course webpage. Certain course materials, namely **grades** and **class Zoom videos**, are available 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 online. 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.

Gradescope Access - This access is set up once you registered in the course. You can access Gradescope through any of the links in blackboard or by going to gradescope.com and logging in with your school credentials. Gradescope is required for all written work in this course.

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

As this is an online course, you are expected to have access to the internet and some more than basic computer literacy. Students will be expected to be able to navigate Blackboard, use links, log into sites and be able to navigate those sites. Students are expected to scan or take pictures of assignments and turn them into multi-page PDF files. If you do not already have a digital file storage or app to convert files to PDF I would recommend having a Dropbox account (also if students have the app, you can use your phone to create multi-page PDFs of your assignments). You can use the following link to connect for free https://db.tt/Lu39TA52). Students are expected to upload work and complete many math assignments on the computer. Students are expected to use ZOOM for video conferencing (so they should also have a working mic and speakers). If you are having difficulty with the technological requirements, you should notify your instructor immediately and contact the advisor at eCampus to find additional resources to help you.

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.)

Participation	5%
HAWKES Lessons	20%
Worksheets	25%
Assessments	40%
Final Exam	10%
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%	D	60–69%
A-	90–93%	F	below 60%
B+	87–89%		
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.

Worksheets

At the end of each module you will have a written worksheet to complete. These module worksheets will cover the material from the previous 1-4 lessons. The worksheets are the opportunity to review the material from the lessons, synthesize concepts, and to improve your notation and mathematical writing. Completed worksheets need to be submitted in Gradescope **until 11 PM on the due date**. Students will receive their graded assignments to review and see where any errors or misconceptions were made. These worksheets will be graded on both content as well as notation and mathematical writing. One of the student learning outcomes for this course is for students to show they understand mathematical notation, can write out clear mathematical solutions, and communicate mathematics concisely. This is equivalent to being able to write essays of a certain length with correct grammar and punctuation. Worksheets should be completed only after reviewing the section content and working through enough problems to ensure that you have a good understanding of the concepts. If you are not understanding the material then you need to ask questions and seek help (see the section labeled Additional resources). Math is inherently comprehensive. If you do not understand a concept, do not try skip over it as you will only make later lessons more difficult to complete. If you fall behind in HAWKES it is your responsibility to get help on the material so that you can complete the worksheets. There are **no extensions on the worksheets**.

Worksheet Guidelines. Your grade on the worksheet will be based not only on the answer to the problems but also on the following criteria:

- Assignments are submitted in Gradescope following the assignment template.
- Submissions are clear (work is not blurry or too light to be read); the pages are in the correct order and oriented correctly; there are not extra pages or pages cut off.
- Your name and id number is 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

Most classes will have some form of group work that includes a short daily worksheet. Participating on the worksheet is a key part of learning the course material. Every day you will upload to Gradescope a scan of your completed worksheet for the day, due 11pm. Grading will be based solely on evidence of participation.

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 a fixed amount of time (see table below) to complete 10 concepts from that module (this includes time for download and submission). You do NOT need a proctor for the assessments but these 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.

Assessments will be posted in Gradescope the morning of the assessment date. Once the assessment is opened the timer will begin. You will have until the timer runs out to complete the assessment, digitize your solutions, upload them into Gradescope, and select the pages for each of your problems. **If you run out of time, you can email me your PDF. Be aware that this is an automatic 5% deduction and for each partial half hour over the time limit you will receive a 10% deduction!!**

Final Exam

The comprehensive final exam for this course will take place on **Friday August 6**. This is a timed, virtually proctored exam. Students will need to join the final exam ZOOM session with a working camera. You will be given 3 hours to complete and submit the final. **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.

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. Tutoring is accessible through Zoom. Appointments can be made for 30 minutes or an hour and can be scheduled up to two weeks in advance. To schedule an appointment students can sign up for an appointment at 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

Zoom Classtime

Classtime for the synchronous sections, and recitations for both synchronous and asynchronous sections, will be held via Zoom.

- Please mute your audio when you are not speaking so that background noise does not disrupt the class.
- You may choose to turn off your video; please present an avatar unique to you, however.
- I will stop for questions regularly. Politely interrupt me if necessary.
- I will call on students by name to answer questions in class. You can always say "pass" if you don't want to answer.
- I don't mind chit-chat in the chat window, but keep it focused on class, and please ask questions out loud.
- Everyone should participate in the small group discussions.

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 assignments (weekly worksheets, daily worksheets, assessments)
- failing to participate in classroom activities
- repeatedly failing Worksheets and Assessments with no attempt at remediation

Recordings

Our zoom sessions will be recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. Likewise, students who unmute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. Recordings will only be made available on Blackboard to other students in the class and will be deleted at the end of the semester.

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.