MATH F122X-FXA/UXA Summer 2021

Hyflex Online Essential Precalculus (3cr)

Instructor Information:

Instructor Information:

Name: Dr. Latrice Bowman **Email:** lnbowman@alaska.edu

Office: Chapman 210B

Online office hours: Zoom (work hours are 8am-6pm Monday-Friday)

Contact: email is preferred (907-474-5427)

Appointments: To make an appointment to meet with your instructor https://calendly.com/lnbowman (*This link is also in Blackboard)*

Course Information

This is a 3 credit online course. This course is set up as a Hyflex course. What that means is that you have the option of this class being synchronous or asynchronous and you can adjust this depending on what is going on with your schedule each week. With this please note, that there are still set due dates for assignments and set expectations that will be expected of you. But, this also means that for students who cannot make the class meetings, you will still be able to complete this course without losing participation credit. For students, who may need to work ahead of schedule, there are options for this. For students who need the interaction and meetings, there are options for this. Please use whatever works best for you.

The course is set up to have ZOOM meetings that will meet MWF 1pm-2pm. If you cannot attend a meeting the recording will be posted and you will be asked to complete a quiz for that attendance credit. Some of the class meetings will be used for small group assignments. If you happen to miss a group assignment day, there will not be a recording however, you will have the opportunity to complete the assignment to receive credit. You should expect to work on this course a minimum of 2-3 hours per day Monday thru Friday (about 12 hours a week) to go through the material, sessions or videos, practice and online work. Some students may need to spend more time than this to go through all of the materials and fully understand the concepts BUT you should not be spending less than this. If you are having difficulty with the material or do not have facility with the prerequisites, you may find that you are spending more time than this. In these cases, you should set up regular times with the tutors and schedule a meeting with your instructor.

Course Description:

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 more than one of MATH 122X, MATH 151X, MATH 156X. **Prerequisites:** Placement into Math 122X by the UAF Math Placement or by permission of instructor.

Course Materials:

Mathematics with Applications; ISBN-13:9781642771237 (this is a digital text- you will have access to tutorials through the videos and HAWKES access).

HAWKES Access- You will be doing a significant portion of your 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*. If you have not yet purchased a code, don't 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 will be set up once you are 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.

Technological 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 will be expected to print assignments. They will be 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 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 will be expected to upload work and complete many math assignments on the computer. Students will be expected to use ZOOM for class sessions and student appointments (so they should also have a working mic and speakers). During class sessions students will be expected to use their mic and speakers as well as whiteboard tools. 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 (the trigonometry section is the only one you will actually need a calculator). On some assessments, students should expect to NOT have a calculator. They will be allowed the use of a non-graphing calculator on certain applications assessments. 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:

- Identify and find all solutions to equations and inequalities
- Simplify algebraic and transcendental expressions
- Simplify polynomial, rational, logarithmic, and exponential expressions
- Graph and interpret graphs of polynomial, rational, logarithmic, and exponential functions
- Understand and differentiate between concepts related to personal finance
- Use correct mathematical notation in writing out solutions
- Apply a variety of techniques to find solutions to equations
- Translate between numerical, graphical and algebraic representations of functions
- Ability to correctly write AND explain mathematics quantitatively and conceptually

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.

Course Evaluation Methods:

Students are expected to actively participate in this course by doing assignments, asking questions and attending office hours (as needed). Students are expected to log into Blackboard and HAWKES a minimum of 3 days a week, complete the HAWKES lessons each of these days, complete written assignments weekly, complete assessments about every three weeks, ask questions and communicate with classmates and the instructor. Grades will be updated each Friday in Blackboard; students will be emailed about low grades. Any student who has two consecutive weekly averages below 50% will be dropped from the course. Your grade in this course will be based on the following components.

Participation

Your participation grade is based on attending class three days a week, the completion the four course introduction assignments, and communicating with the instructor. Every two weeks you will receive information about your course progress. If necessary you may be asked to schedule a meeting with your instructor to talk about your progress. This component makes up 10% of your overall grade.

The course introduction assignments are:

1) Completing the Homework Introduction Assignment in Week 1

2) Completing the Assessment Introduction Assignment in Week 3

3) Making and attending a 15-minute appointment with the instructor in the first two weeks of class; the instructor appointments need to be scheduled and completed between Monday May 17 and Wednesday June 2. Students who start the class late will be given 72 hours from their registration date to complete past due assignments. Any appointments completed outside of these dates will not receive credit towards this assignment.

4) Making and attending a 30 minute online tutoring appointment between the first and second assessment. The tutoring appointments need to be completed between Thursday June 3 and Wednesday June 16. Any appointments completed outside of these dates will not receive credit towards this assignment. Do not wait until the last minute to schedule these; there are more than enough appointment slots for all students between the given dates and additional time slots, for a grade, will not be added.

HAWKES Lessons

Each lesson in this course will consist of reading, watching videos, practicing the concepts and then being assessed on the material. After each lesson in this course you will be expected to show mastery of 90% of the lesson material. Each mastery needs to be completed by a certain date, but these can be started at any time. You will have multiple attempts at the mastery and the best score is taken. If you do not reach the mastery you will be required to go back to relearn some concepts before you can 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 done in HAWKES. Students who miss a lesson deadline can still complete these for partial 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. The HAWKES lessons makes up 20% of your grade.

Worksheets

Every week you will have one written worksheet to complete. These worksheets will cover the material from the prior 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. Students will receive their graded assignments to review and see where any errors or misconceptions were made. These worksheets will be graded both on 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 don't 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. **Worksheets may NOT be submitted late; 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.
- 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; and work is on the given templates.
- 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 PDF for your 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.

You are expected to submit a final, polished copy of your work and you will be graded based on the above expectations. Worksheets make up 25% of your overall grade.

Assessments

For each module 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 some problems from that module with an additional 30 minutes for download and submission. You do NOT need a proctor for the assessments but these are closed book, closed notes and digital 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 exam 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. Students can review their graded assessment in Gradescope.

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. **Students will not be able to submit assessments late so they will need to keep track of their time!!**

Assessment make up 45% of your grade and the dates and coverage information are shown below:

Assessment dates and Information				
Assessment	Date to be taken	Topic Coverage	Time limit	Calculator
1	Wednesday June 9	Algebra and Equations	1.5 hours	no
2	Wednesday June 23	Linear Equations and Systems	1.5 hours	no
3	Friday July 16	Algebraic Functions	1.5 hours	no
4	Friday August 6	Exponentials, Logarithms and Finance	2 hours	yes

Grading

Grades will be based on the following percentages:

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

Your instructor follows the University of Alaska Fairbanks Incomplete Grade Policy: "The letter "I" (Incomplete) is a temporary grade used to indicate that the student has satisfactorily completed (C or better) the majority of work in a course but for personal reasons beyond the student's control, such as sickness, has not been able to complete the course during the regular semester. Negligence or indifference are not acceptable reasons for an "I" grade." Students asking for an "I" grade must provide documentation of circumstances beyond their control that prevented them from completing the course.

Grading Rubric

Assessment of the following items will be used in the given proportions to determine student grades.

Participation 15% of grade
HAWKES Lessons 20% of grade
Worksheets 25% of grade
Assessments 40% of grade

Faculty Initiated Withdrawal triggered by Inadequate Student Participation

Students who stop participating in the course may be withdrawn and will be notified prior to withdrawal through their UA email. Here are some indications of inadequate participation:

- Not completing or not turning in **THREE** written homework assignments
- Missing an assessment
- Not logging into Blackboard at least 3 days a week
- Missing **FOUR** consecutive HAWKES Lessons
- having two consecutive bi-weekly grade check with grades below 50%

Extra Credit

There are few opportunities for extra credit in this course. There are bonus assignments in HAWKES that will earn you some extra credit. These can help you determine areas that you may need more practice.

Academic Integrity

As described by UAF, scholastic dishonesty constitutes a violation of the university rules and regulations and is punishable according to the procedures outlined by UAF. Scholastic dishonesty includes, but is not limited to, cheating on any assignment, plagiarism, and collusion. Cheating includes providing answers to or taking answers from another student or source. Plagiarism includes the use of another author's words or arguments without attribution. Collusion includes unauthorized collaboration with another person in preparing written work for the fulfillment of any course requirement. Scholastic dishonesty is punishable by a zero on the assignment for the first offense and a second offense removal from the course with a grade of "F." For more information go to The Student Code of Conduct

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?authuser=0

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.

Correspondence with Instructor:

Students who email the instructor with a question should expect a response within 48 hours (on Friday evenings and weekends you should expect a response on the following Monday). **Emails should be from a UA email and should include the students first and last name, which course they are in, and a clearly stated question**. Emails without this minimal information will not receive responses. Emails should maintain a professional manner; emails containing inappropriate material or language will be ignored and in extreme cases will be sent to the Dean of Students for further action.

Your instructor will send out regular grade checks. It is your responsibility to verify your grade and ask if there are questions. These grade checks are also a time for you to look at your study habits and see what may need to be done to improve your grade.

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 through email or by scheduling an appointment at https://calendly.com/lnbowman

DMS Online Tutoring:

Free tutoring available Monday - Friday! 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

SSS (Student Support Services)

SSS provides one-on-one tutoring to students who satisfy the requirements of the program. In addition to math tutoring SSS provides, advising, all core subject tutoring, laptop rentals and some other services.

Office of Disability Services:

This office implements the Americans with Disabilities Act (ADA), and insures that UAF students have equal access to the campus and course materials. I will work with the Office of Disabilities Services (203 WHIT, 474-7043) to provide reasonable accommodation to students with disabilities. Please provide current accommodation paperwork to me as soon as you receive it. Without the letter, no accommodations will be made.

For more information and resources, please see the Academic Advising Resource List

UAF embraces and grows a culture of respect, diversity, inclusion, and caring. Students at this university are protected against sexual harassment and discrimination (Title IX). Faculty members are designated as responsible employees which means they are required to report sexual misconduct. Graduate teaching assistants do not share the same reporting obligations. For more information on your rights as a student and the resources available to you to resolve problems, please visit Students Rights and Responsibilities.