School of
Distance Education

Andrews University

SYLLABUS

MATH 168 Precalculus

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School of Distance Education

Self-Paced Format
This course follows a self-paced online format. This format allows you to set your own pace of study. While you have 180 days from your start date to complete the course with Andrews University, it is your responsibility to meet any deadlines set by your home institution. The last day to withdraw with a full refund is 15 days after your start date. See more withdrawal details here.

Instructor Contact
Please refer to course in LearningHub for the teacher contact information.

Communication with the Instructor
It is important to remember that while the Internet is available 24 hours a day, your instructor is not. You can expect that your instructor will respond to e-mail message to you within *2 business days* during the week and may not be available to respond on weekends.

Other Assistance

Username and password assistance	helpdesk@andrews.edu	(269) 471-6016
Technical assistance with online courses	dlit@andrews.edu	(269) 471-3960
Exam requests and online proctoring	sdeexams@andrews.edu	Call: (269) 471-6566
Distance Student Services - any other questions	sdestudents@andrews.edu	Text: (269) 397-4477

Part 1: Course Information

Course Description
Linear, quadratic, and absolute value equations and inequalities with applications; radical equations; polynomial, rational, exponential, logarithmic, inverse, trigonometric functions; higher order equations; exponential and logarithmic equations; the unit circle, trigonometric identities and equations; Law of Sines and Cosines; vectors in the plane, polar coordinates and graphs; complex numbers and De Moivre's Theorem; conic sections.

Prerequisites
MPE ≥ P3 or MATH 165 College Algebra or MATH 166 College Algebra for Business

Required Text/Material
Sisson, P. (2021). *Precalculus* 3rd. Hawkes Learning. Product ISBN: Software + eBook 9781642771749

Credit Hour and Commitment
This course is offered for 3 semester credits; therefore, it is expected that you will spend 135 hours total on this course. This course has 16 modules with 14 lessons, 3 tests, 1 final exam, 13 blogs, and homework assignments completed in Hawkes Learning for each module. Each module represents a week of a typical semester course. It is recommended that you budget 9 hours for studying and completing the activities for each module. There are suggested schedules to accomplish this work included in this syllabus.

Institutional Outcomes

1.a. Demonstrate competence in intellectual, affective, and practical skills to prepare for careers in the twenty-first century, lifelong learning and service.

1.b. Select and apply intellectual, affective, and practical skills from their field of study to solve meaningful problems. The identified transferable skills for undergraduate students are: information literacy, quantitative literacy, engaging diverse perspectives, ethical reasoning, analytical inquiry in the form of problem solving and creative thinking, communication, wellness and transferable life skills.

2.b. Pursue enduring questions through study in core fields and explore the connections between those fields.

Program Learning Outcomes

1. Demonstrate understanding of human communication from a theoretical basis, in varied contexts and applied to promote change.

2. Critical and creative thinking, and problem-solving skills.

3. Apply the scientific method to our real life.

Student Learning Outcomes

- Understand and apply mathematics to real-world activities (SLO1)
- Recall basic facts and terms (SLO2)
- Develop problem-solving skills (SLO3)
- Evaluate and analyze various data sets and draw conclusions from such data (SLO4)
- Appraise and discuss ideas related to new technologies (SLO5)
- Appreciate the utility and power of mathematics in a wide range of topics (SLO6)
- Prepare for future coursework requiring mathematics (SLO7)

Mental Health Support

Andrews University seeks to foster belonging and care. It is not uncommon for students to face challenges that hinder academic progress, like academic stress, sleep disturbances, managing multiple responsibilities, relationship issues, anxiety or feelings of despair or depression. If you or someone you know is grappling with any of these concerns, we urge you to seek assistance. The university offers valuable, free resources that can help address these problems effectively.

- If you are struggling with this class, please contact the course instructor as soon as possible.
- Contact your academic advisor if you are struggling in multiple classes or unsure whether you are making the most of your time at, or unsure what academic resources are available at Andrews University
- Students in the U.S., access Andrews Telehealth for new medical, counseling therapy, psychiatry, and diet & nutrition support to schedule a consultation.
- **If you are experiencing a mental health crisis, contact Academic Live Care 24/7 remote crisis services at 1-866-349-5575.**
- **Contact 911 for life threatening emergencies.**

Additional information and resources are at the School of Distance Education Student Wellbeing webpage.

Part 2: Course Methods and Delivery

Methods of Instruction

Methods of instruction include assigned readings from the textbook and the course material, videos, Hawkes Learning for homework, reviews, and tests, and instructor interaction via discussions in LearningHub. Regular participation in the course is essential to good performance.

Technical Requirements

- Computer: PC (Win 10 or newer) or MAC (10.14 or better)
- A webcam with microphone, and speakers (or plug in headset)
- Internet: 2.4 Mbps or faster DSL, cable or Wi-Fi connection
- Browser: Current version of Chrome or Firefox
- Software: Office 2013 or newer (Office 365 available here)

LearningHub Access

This course is delivered online through LearningHub at http://learninghub.andrews.edu

Your username and password are your Andrews username and password. You need to activate your username and password to access LearningHub.

Please do this online here: https://vault.andrews.edu/vault/pages/activation/information.jsp if you haven't already. If you need assistance, call or email us: (296) 471-6016 or mailto:helpdesk@andrews.edu.

If you need technical assistance at any time during the course, or to report a problem with LearningHub, please email dlit@andrews.edu or call (269) 471-3960.

Hawkes Learning Access

Please make sure to access Hawkes only through the Publisher link included in the opening section of the course.

Part 3: Course Requirements

Important Note: Activity and assignment details will be explained in detail within each learning module. If you have any questions, please contact your instructor.

Your Schedule

In LearningHub, you will access online lessons, course materials, and resources. This course is self-paced. You must complete the course within 180 days. This is the Consortium policy. You may have a stricter deadline imposed by graduation, financial aid, or other restrictions.

Start by creating a schedule for completion of the course.
- Determine your deadline. Do you need a transcript sent to your home institution?
- Working from your deadline, count backwards. Allow 2 weeks after you take your final exam for your final grade to be calculated. Allow another 2 weeks for the transcript to be processed and sent.
- Now use the suggested schedules to create a schedule for yourself that ensures completion 4 weeks before your deadline.

Submit your course plan to your instructor within LearningHub AND discipline yourself to make regular progress.

Assessment Descriptions

Hawkes Learning Assignments

These are administered online via Hawkes Learning. These are intended to help you to learn and understand the material for each section. There is no time limit, and you have 3 attempts. From within the homework assignment, you will have access to the electronic textbook, guided problem-solving, additional worked-out sample problems, and several other learning aids.

Blog Questions

The blog section of the course is one of the most important sections of the course where you share ideas. Strategy sharing on how to solve problems and how to solve related problems happens here. Students are invited to share their ideas and thoughts on the topic and related it to the holy scriptures.

Write at least two good paragraphs. Please post your response in the Learning Hub.

Rubrics

Discussion Forum Rubric

	Excellent (5)	Average (3)	Below Average (1)	Unacceptable (0)
Response is:	Well thought-out, addressing the question carefully and completely. Student Posts on time and responds to at least 2 learners	Reasonable, but does not address all aspects of the question, address them carelessly.	Minimal, showing little thought and missing many question aspects completely.	Off topic or completely missing

Exams

There are 4 tests and exams in this course. Test 1 will cover sections 1.5, 1.6, 1.7, 1.8, 1.9, 2.2, 3.1 & 3.3. Test 2 will cover sections 6.3, 6.4, 6.5, 7.1, & 7.2. Test 3 will cover 7.3, 7.6, 8.1, 8.2, 8.3, & 8.4. The Final will be a comprehensive exam covering all sections that were covered in the course. You will be allowed 180 minutes to take each exam. All tests and exams must be taken under the supervision of a proctor. In each module that contains an exam, you will find what to review and what materials are allowed (if any) during the exam.

Please read the important information about taking exams and how online proctoring works at www.andrews.edu/distance/students/exams.html. Sign up for a date to take the exam as early as possible. You may sign up as early as one month before the last date of the exam window. Spaces fill quickly. Therefore, it is best to sign up as early as possible. Follow instructions that apply to your situation in the exam request form to set up a proctoring appointment before the exam due date. There will be prompts throughout your course to sign up as well.

Please note that an exam code is never released to the student. All students must present photo identification before each exam session. Exams can only be proctored after a deadline with approval directly from the instructor to the Testing Center (sdeexams@andrews.edu or 269-471-6566). No exam is returned to the student for review. To aid studying for future exams, you may request the instructor to provide summary feedback on an exam.

Suggested schedule for completion in 8 weeks

Modules	Lessons	Readings	Assignments	Outcomes Met
Intro	These items will need to be completed before you will have access to the rest of the course	Orientation Course Overview Introductions Academic Integrity	Schedule Introduce Yourself Academic Integrity Quiz Academic Integrity Statement	
1	Chapter 1: Algebraic Expressions, Equations, and Inequalities	1.5 Complex Numbers 1.6 Linear Equations in One Variable	**Hawkes Learning** 1.5, 1.6 **LearningHub** Blog 1	SLO1, SLO2 SLO3, SLO6, SLO7
	Chapter 1: Algebraic Expressions, Equations, and Inequalities Cont.	1.7 Linear Inequalities in One Variable 1.8 Polynomials	**Hawkes Learning** 1.7, 1.8 **LearningHub** Blog 2	SLO1, SLO2 SLO3, SLO5, SLO6, SLO7
2	Chapter 2: Equations and Inequalities in Two Variables	1.9 Rational and Radical Equations 2.2 Circles	**Hawkes Learning** 1.9, 2.2 **LearningHub** Blog 3	SLO1, SLO2 SLO3, SLO4, SLO6, SLO7
	Chapter 3: Relations, Functions, and Their Graphs	3.1 Relations and Functions 3.3 Quadratic Functions	**Hawkes Learning** 3.1, 3.3 **LearningHub** Blog 4	SLO1, SLO2 SLO3, SLO5, SLO6, SLO7
3	Chapter 4: Working with Functions Chapter 5: Polynomial and Rational Functions	4.4 Inverses of Functions 5.1 Polynomial Functions and Polynomial	**Hawkes Learning** 4.4, 5.1 PROCTORED Test 1 **LearningHub** Blog 5	SLO1, SLO2 SLO3, SLO4, SLO6, SLO7
	Chapter 5: Polynomial and Rational Functions Cont.	5.2 Polynomial Division 5.3 Locating Real Zeros 5.5 Rational Functions	**Hawkes Learning** 5.2, 5.3, 5.5 **LearningHub** Blog 6	SLO1, SLO2 SLO3, SLO4, SLO5, SLO6, SLO7
4	Chapter 6: Exponential and Logarithmic Functions	6.1 Exponential Functions and Their Graphs 6.2 Exponential Models	**Hawkes Learning** 6.1, 6.2 **LearningHub** Blog 7	SLO1, SLO2 SLO3, SLO4, SLO6, SLO7
	Chapter 6: Exponential and Logarithmic Functions Cont.	6.3 Logarithmic Functions and Their Graphs 6.4 Logarithmic Properties and Models 6.5 Exponential and Logarithmic Equations	**Hawkes Learning** 6.3, 6.4, 6.5 **LearningHub** Blog 8	SLO1, SLO2 SLO3, SLO4, SLO5, SLO6, SLO7

Modules	Lessons	Readings	Assignments	Outcomes Met
5	Chapter 7: Trigonometric Functions	7.1 Radian and Degree Measure 7.2 Right Triangles and Trig	**Hawkes Learning** 7.1, 7.2 PROCTORED Test 2 **LearningHub** Blog 9	SLO1, SLO2 SLO3, SLO4, SLO6, SLO7
	Chapter 7: Trigonometric Functions Cont.	7.3 Unit Circle and Trig 7.6 Inverse Trig Functions	**Hawkes Learning** 7.3, 7.6 **LearningHub** Blog 10	SLO1, SLO2 SLO3, SLO4, SLO5, SLO6, SLO7
6	Chapter 8: Trigonometric Identities and Equations	8.1 Fundamental Trigonometric 8.2 Sum and Difference Identities	**Hawkes Learning** 8.1, 8.2 **LearningHub** Blog 11	
	Chapter 8: Trigonometric Identities and Equations Cont.	8.3 Product-Sum Identities 8.4 Trigonometric Equations	**Hawkes Learning** 8.3, 8.4 PROCTORED Test 3	SLO1, SLO2 SLO3, SLO4, SLO6, SLO7
7	Chapter 9: Additional Topics in Trigonometry	9.1 The Law of Sines	**Hawkes Learning** 9.1 **LearningHub** Blog 12	SLO1, SLO2 SLO3, SLO4, SLO5, SLO6, SLO7
	Chapter 9: Additional Topics in Trigonometry Cont.	9.2 The Law of Cosines	**Hawkes Learning** 9.2 **LearningHub** Blog 13	SLO1, SLO2 SLO3, SLO4, SLO6, SLO7
8		Practice Final	**Hawkes Learning** Practice Final Exam	SLO1, SLO2 SLO3, SLO4, SLO5, SLO6, SLO7
	PROCTORED FINAL EXAM			

Suggested schedule for completion in 16 weeks

Modules	Lessons	Readings	Assignments	Outcomes Met
Intro	These items will need to be completed before you will have access to the rest of the course	Orientation Course Overview Introductions Academic Integrity	Schedule Introduce Yourself Academic Integrity Quiz Academic Integrity Statement	
1	Chapter 1: Algebraic Expressions, Equations, and Inequalities	1.5 Complex Numbers 1.6 Linear Equations in One Variable	**Hawkes Learning** 1.5, 1.6 **LearningHub** Blog 1	SLO1, SLO2 SLO3, SLO6, SLO7
2	Chapter 1: Algebraic Expressions, Equations, and Inequalities Cont.	1.7 Linear Inequalities in One Variable 1.8 Polynomials	**Hawkes Learning** 1.7, 1.8 **LearningHub** Blog 2	SLO1, SLO2 SLO3, SLO5, SLO6, SLO7
3	Chapter 2: Equations and Inequalities in Two Variables	1.9 Rational and Radical Equations 2.2 Circles	**Hawkes Learning** 1.9, 2.2 **LearningHub** Blog 3	SLO1, SLO2 SLO3, SLO4, SLO6, SLO7
4	Chapter 3: Relations, Functions, and Their Graphs	3.1 Relations and Functions 3.3 Quadratic Functions	**Hawkes Learning** 3.1, 3.3 **LearningHub** Blog 4	SLO1, SLO2 SLO3, SLO5, SLO6, SLO7
5	Chapter 4: Working with Functions Chapter 5: Polynomial and Rational Functions	4.4 Inverses of Functions 5.1 Polynomial Functions and Polynomial	**Hawkes Learning** 4.4, 5.1 PROCTORED Test 1 **LearningHub** Blog 5	SLO1, SLO2 SLO3, SLO4, SLO6, SLO7
6	Chapter 5: Polynomial and Rational Functions Cont.	5.2 Polynomial Division 5.3 Locating Real Zeros 5.5 Rational Functions	**Hawkes Learning** 5.2, 5.3, 5.5 **LearningHub** Blog 6	SLO1, SLO2 SLO3, SLO4, SLO5, SLO6, SLO7
7	Chapter 6: Exponential and Logarithmic Functions	6.1 Exponential Functions and Their Graphs 6.2 Exponential Models	**Hawkes Learning** 6.1, 6.2 **LearningHub** Blog 7	SLO1, SLO2 SLO3, SLO4, SLO6, SLO7
8	Chapter 6: Exponential and Logarithmic Functions Cont.	6.3 Logarithmic Functions and Their Graphs 6.4 Logarithmic Properties and Models 6.5 Exponential and Logarithmic Equations	**Hawkes Learning** 6.3, 6.4, 6.5 **LearningHub** Blog 8	SLO1, SLO2 SLO3, SLO4, SLO5, SLO6, SLO7
9	Chapter 7: Trigonometric Functions	7.1 Radian and Degree Measure 7.2 Right Triangles and Trig	**Hawkes Learning** 7.1, 7.2 PROCTORED Test 2 **LearningHub** Blog 9	SLO1, SLO2 SLO3, SLO4, SLO6, SLO7

Modules	Lessons	Readings	Assignments	Outcomes Met
10	Chapter 7: Trigonometric Functions Cont.	7.3 Unit Circle and Trig 7.6 Inverse Trig Functions	**Hawkes Learning** 7.3, 7.6 **LearningHub** Blog 10	SLO1, SLO2 SLO3, SLO4, SLO5, SLO6, SLO7
11	Chapter 8: Trigonometric Identities and Equations	8.1 Fundamental Trigonometric 8.2 Sum and Difference Identities	**Hawkes Learning** 8.1, 8.2 **LearningHub** Blog 11	
12	Chapter 8: Trigonometric Identities and Equations Cont.	8.3 Product-Sum Identities 8.4 Trigonometric Equations	**Hawkes Learning** 8.3, 8.4 PROCTORED Test 3	SLO1, SLO2 SLO3, SLO4, SLO6, SLO7
13	Chapter 9: Additional Topics in Trigonometry	9.1 The Law of Sines	**Hawkes Learning** 9.1 **LearningHub** Blog 12	SLO1, SLO2 SLO3, SLO4, SLO5, SLO6, SLO7
14	Chapter 9: Additional Topics in Trigonometry Cont.	9.2 The Law of Cosines	**Hawkes Learning** 9.2 **LearningHub** Blog 13	SLO1, SLO2 SLO3, SLO4, SLO6, SLO7
15		Practice Final	**Hawkes Learning** Practice Final Exam	SLO1, SLO2 SLO3, SLO4, SLO5, SLO6, SLO7
16	**PROCTORED FINAL EXAM**			

Completing Assignments

All assignments for this course will be submitted electronically through LearningHub or Hawkes Learning unless otherwise instructed. Assignments and exams must be completed **within 180 days** of course registration date. This timeframe is subject to change depending on deadlines set by your home institution.

Part 4: Grading Policy

Graded Course Activities

Percent %	Description
20	Blogs
20	Hawkes Learning Homework
30	Hawkes Tests
30	Final Exam
100	*Total Percent Possible*

Viewing Grades in LearningHub
- Click into the course.
- Click This Course in the top menu
- Select Grades in the drop-down

Letter Grade Assignment

Letter Grade	Percentage
A	93-100%
A-	90-92%
B+	88-89%
B	83-87%
B-	80-82%
C+	78-79%
C	73-77%
C-	70-72%
D	60-69%
F	0-59%

Part 5: Course Policies

Withdrawal and Incomplete Policies

The current withdrawal policy can be found online at
https://www.andrews.edu/distance/students/gradplus/withdrawal.html. The incomplete policy
is found online at http://www.andrews.edu/weblmsc/moodle/public/incompletes.html.

Maintain Professional Conduct Both in the Classroom and Online

The classroom is a professional environment where academic debate and learning take place.
Your instructor will make every effort to make this environment safe for you to share your
opinions, ideas, and beliefs. In return, you are expected to respect the opinions, ideas, and
beliefs of other students—both in the face-to-face classroom and online communication.
Students have the right and privilege to learn in the class, free from harassment and disruption.

Academic Accommodations

Students who require accommodations may request an academic adjustment as follows:

1. Read the Andrews University Disability Accommodation information
   at andrews.edu/services/sscenter/about/accessibility-accommodations.html
2. Download the form
   at andrews.edu/services/sscenter/disability/accommodationsreqform.pdf. Email the
   completed form and disability documentation (if any) to disabilities@andrews.edu.
3. Work with the Disability Office to learn what support is available online and be ready to
   show your disability contract for the current semester to the exam proctor at the start of
   any exam session, if extra time is allowed.

Commitment to Integrity

As a student in this course, and at the university, you are expected to maintain high degrees of
professionalism, commitment to active learning, participation in this course, and integrity in
your behavior in and out of this online classroom.

Commitment to Excellence

You deserve a standing ovation based on your decision to enroll in, and effectively complete this course. Along with your pledge of "commitment to Integrity" you are expected to adhere to a "commitment to excellence." Andrews University has established high academic standards that will truly enhance your writing and communication skills across the disciplines and in diverse milieu with many discourse communities in the workplace.

Honesty

Using the work of another student or allowing work to be used by another student jeopardizes not only the teacher-student relationship but also the student's academic standing. Lessons may be discussed with other students, tutors may help to guide a student's work, and textbooks, encyclopedias and other resource materials may be used for additional assistance, but the actual response must be the student's own work. A student who gives information to another student to be used in a dishonest way is equally guilty of dishonesty.

Any violation of this policy will be taken before the Higher Education Academic and Curriculum Committee for appropriate punitive action.

AI Generated Work

Student work may be submitted to AI or plagiarism detection tools in order to ensure that student work product is human created. The submission of AI generated work constitutes plagiarism and is a violation of the Andrews University academic integrity standards for students.