



# MATH 1332

## Contemporary Mathematics I

Faculty:

OC Faculty

## Faculty Information

---

*Faculty specific information, such as name, email address, phone number, and office hours appears here.*

### **Expectations for Engagement for Instructor:**

As an instructor, I understand the importance of clear, timely communication with my students. In order to maintain close communication, I

- have provided my contact information at the beginning of this syllabus;
- when possible, will respond to messages no later than the next day if received Monday through Thursday, and by Monday if received Friday through Sunday; and,
- notify students of any extended times that I will be unavailable and provide them with alternative contact information (either for me or the chair of the department).

As an instructor, I understand that my students will work to the best of their abilities to fulfill the course requirements. In order to help them in this area, I will

- provide clear information about grading policies and assignment requirements in the course syllabus, and
- communicate any changes to assignments and/or to the course calendar to students as quickly as possible.

As an instructor, I understand that I need to provide regular, timely feedback to students about their performance in the course. To keep students informed about their progress, I will

- provide grades for assignments and exams within one week of submission, and
- update all grades on Blackboard within one week of each exam.

## Information About the Course

---

### **Course Description**

Topics may include introductory treatments of sets, logic, number systems, number theory, relations, functions, probability and statistics. Appropriate applications are included. This course is designed primarily for liberal arts majors.

### **Course Prerequisites:**

Prerequisite: MATH 0375 passed with a "C" or better, or satisfactory placement score.

Materials may vary by instructor. Be sure to check the syllabus for your section on Blackboard before purchasing materials.

## Required Materials

---

Textbook The textbook is *A Survey of Mathematics with Applications*, 9<sup>th</sup> edition, by Angel, Abbott, and Runde published by Pearson Education, Inc.  
(Print: ISBN-13 978-0-321-75966-5, eText: ISBN-13 978-0-321-63924-0)

*MyMathLab may or may not be required, depending on instructor.*

Calculator A calculator is required. The calculator should allow the use of scientific notation and be capable of evaluating exponential expressions. The TI-30 is a relatively inexpensive calculator which is satisfactory for the course. Graphing calculators are not allowed on exams.

Paper Standard-size loose-leaf notebook paper is required.

Pencils Pencils for any work submitted for grading.

## Optional Materials

---

Solutions *Student's Solutions Manual for A Survey of Mathematics with Applications*, 9<sup>th</sup> edition by Angel, Abbott, Runde, & Herrick (ISBN-13 978-0-321-63931-8).

## Grading

---

Course components and component percentages may vary by instructor. The information below is for illustrative purposes only.

At the end of the semester each student's weighted average is computed using the following percentages.

Category	Component	Component Percentage	Category Percentage
Other	Class Participation	10%	35%
	Homework	25%	
Project	Project	15%	15%
Exams	Exam 1	14%	50%
	Exam 2	14%	
	Exam 3	14%	
	Final Exam*	8%	
	<b>Total</b>	<b>100%</b>	

Letter grades are assigned according to the student's weighted average.

Semester Grade	Weighted Average
A	90-100
B	80- 89
C	70- 79
D	60- 69
F	0- 59

### **Class Participation (10%)**

For each class meeting, students will usually receive a score for participating in discussion and in-class problem solving.

### **Homework (25%)**

Homework is assigned in class at the end of lecture. Homework assignments are posted on Blackboard.

Make-up work is not available for homework assignments. The lowest two homework assignment scores are dropped.

### **Project (15%)**

A project will be assigned during the semester. Students will have at least a week in which to complete the project.

Make-up work is not available for the project. The project score cannot be dropped.

### **Exams (50%)**

There are three exams and a final exam. The dates of all exams appear on the attached calendar.

### **Late Work & Make-Up Exams**

Late work is accepted, and make up exams are available, only for (1) required participation in an Odessa College athletic event, or (2) the observance of a religious holy day (as defined by Texas Education Code §51.911(2b)). Students are required to notify the instructor prior to any such absence.

## **Student Course Participation**

---

**As a student, I understand that I am responsible for keeping up with the course. To help with this, I**

- will identify alternative computer and internet access in case my primary computer crashes or my internet service is unavailable;
- recognize that the college provides free wi-fi and access to computer labs during regular campus hours to help me in completing any online assignments; and,
- understand that late work will not be accepted, even if technical issues arise due to unreliable equipment or service.

**As a student, I understand that I should communicate quickly with the instructor any issue or emergency that will impact my involvement with or performance in the class. This includes, but is not limited to**

- getting “kicked off” of the system during tests or quizzes;
- having trouble submitting assignments; and
- dealing with a traumatic personal event.

**As a student, I understand that it is my responsibility to understand course material and requirements and to keep up with the course calendar. I will**

- seek help and clarification from my instructor and/or tutors,
- ask questions if I don’t understand,
- access my course regularly to keep up with assignments, and
- for online courses, check my email frequently so that I am aware of any important announcements.

**As a student, I understand that I will have the opportunity to provide feedback on my experience in this course through the end-of-course Student Evaluation of Instruction (SEI).**

## Course Policies

---

### Disclaimer

This syllabus is tentative and subject to change in any part at the discretion of the instructor. Any changes will be in accordance with Odessa College policies. Students will be notified of changes, if any, in timely manner.

### Original Effort

The work submitted for this course must be original work prepared by the student enrolled in this course. Efforts will be recognized and graded in terms of individual performance, but students are encouraged to collaborate with other students in this course.

### Digital Protocol

Inside the classroom, cell phones should be placed on either *vibrate* or *silent* mode and students are not allowed to speak on their phone. During lecture phones should be accessed in emergency cases only.

### Attendance Policy

Attendance will be taken daily, and students are expected to attend class regularly.

### AVID

A unique student-centered instructional approach is employed. Students may engage in video viewing, interactive lecture, in-class problem-solving, and computer-aided instruction.

### Grade Inquiry Policy

It is the responsibility of the student to keep track of assignment submissions and grades. Grades are posted on Blackboard after each exam. You are welcome to come see the instructor anytime during office hours to discuss your academic progress.

## General Course Requirements

1. Attend class and participate.
2. Contribute and cooperate with civility.
3. **Submit assignments on time. Late work is not accepted.**

## Incomplete Policy

This grade is given when circumstances beyond a student's control prevent him/her from completing the work for a course by the end of the scheduled semester. An 'Incomplete' grade may be given only if:

1. The student has passed all completed work.
2. If he/she has completed a minimum of 75% of the required coursework. A grade of an "I" will only be assigned when the conditions for completion have been discussed and agreed upon by the instructor and the student.
3. An Incomplete form is submitted.

# Course Calendar

---

The course calendar may vary by instructor. The calendar below is included for illustrative purposes only.

Date	Section	Topics
8/24		Introduction
8/25	2.1	Set Concepts
8/26	2.2	Subsets
8/27	2.3	Venn Diagrams and Set Operations
8/31	2.4	Venn Diagrams with Three Sets & Verification of Equality of Sets
9/01	2.5	Applications of Sets
9/02		
9/03	<b>Exam 1</b>	
9/08	3.1	Statements and Logical Connectives
9/09	3.2	Truth Tables for Negation, Conjunction, and Disjunction
9/10	3.3	Truth Tables for Conditional and Biconditional
9/14	3.4	Equivalent Statements
9/15	3.5	Symbolic Arguments
9/16		
9/17	<b>Exam 2</b>	
9/21	4.1	Additive, Multiplicative, and Ciphered Systems of Numeration
9/22	4.2	Place-Value or Positional-Value Numeration Systems
9/23	4.3	Other Bases
9/24	4.4	Computation in Other Bases
9/28	5.1	Number Theory
9/29		
9/30	<b>Exam 3</b>	
10/01	5.2	The Integers
10/05	5.3	The Rational Numbers
10/06	5.4	The Irrational Numbers and the Real Number System
10/07	5.5	Real Numbers and Their Properties
10/08	5.6	Rules of Exponents and Scientific Notation
10/12		
10/13		Review
10/14	<b>Final Exam</b>	

# General Education – Core Objectives (COs)

---

## Description of Core Objectives (CO's)

Given the rapid evolution of necessary knowledge and skills and the need to take into account global, national, state, and local cultures, the core curriculum must ensure that students will develop the essential knowledge and skills they need to be successful in college, in a career, in their communities, and in life. Therefore, with the assistance of the Undergraduate Education Advisory Committee, the Coordinating Board has approved guidelines for a core curriculum for all undergraduate students in Texas.

Through the application and assessment of objectives within the institution's core curriculum, students will gain a foundation of knowledge of human cultures and the physical and natural world; develop principles of personal and social responsibility for living in a diverse world; and advance intellectual and practical skills that are essential for all learning. Appropriate Odessa College faculty periodically evaluates all of the courses listed in the descriptions on the following pages of this catalog and keys them to Odessa College's Institutional Core Objectives (COs), as defined by the Texas Higher Education Coordinating Board (THECB). (Source: *Odessa College Catalog of Courses*)

## Odessa College's Core Objectives (COs):

1. *Critical Thinking Skills* - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information;
2. *Communication Skills* - to include effective development, interpretation and expression of ideas through written, oral and visual communication;
3. *Empirical and Quantitative Skills* - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions;
4. *Teamwork* - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal;
5. *Personal Responsibility* - to include the ability to connect choices, actions and consequences to ethical decision-making;
6. *Social Responsibility* - to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities.

## Discipline Core Statement

---

### Mathematics

Through this course, students will focus on quantitative literacy involving sets and number theory. In each of these, students will develop skills using logic, pattern recognition and relationships. The concepts will be applied to real-world situations, when applicable.

 = Required Core Objectives

Foundational Component Area	SCH	CT	COM	EQS	TW	SR	PR
-----------------------------	-----	----	-----	-----	----	----	----

Mathematics	3						
-------------	---	---	---	---	--	--	--

Courses in this category focus on quantitative literacy in logic, patterns, and relationships. Courses involve the understanding of key mathematical concepts and the application of appropriate quantitative tools to everyday experience.

## Course Objectives

---

Upon successful completion, students will be able to

1. identify concepts of sets,
2. describe and use different number systems,
3. identify the subsets of real numbers, and
4. describe generalizations of mathematics to real-world situations.

## Learning Outcomes (LOs)

---

Learning Outcome(s)	Core Objectives (CO's)
1,2,3,4	<i>Critical Thinking Skills</i> - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
1,2,4	<i>Communication Skills</i> - to include effective development, interpretation and expression of ideas through written, oral and visual communication
1,2,3,4	<i>Empirical and Quantitative Skills</i> - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	<i>Teamwork</i> - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	<i>Personal Responsibility</i> - to include the ability to connect choices, actions and consequences to ethical decision-making
	<i>Social Responsibility</i> - to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities

## Odessa College Policies

---

### Tuition Discounts

The **“First Course is Free”** discount waives standard tuition and fees for the first 3 credit hours taken at Odessa College. The discount applies to high school graduates taking their first class at Odessa College as well as transfer students taking their first class at Odessa College.



The **“Academic Progress Discount”** provides a 10% tuition discount upon completion of 30 credit hours until reaching 45 credit hours. It provides a 20% discount upon completion of 45 credit hours until reaching 60 credit hours. Student must maintain a 2.0 GPA to remain eligible for the discount.

## **Academic Policies**

Note that the OC Student Handbook states (page 32) that “[i]n cases of academic dishonesty, the instructor has the authority to impose appropriate scholastic penalties. Complaints or appeals of disciplinary sanctions may be filed in accordance with the college due process procedure. Copies of the college due process procedure are available in the office of The Director of Student Life (CC104).”

For more information on your rights and responsibilities as a student at Odessa College, please refer to the following: *The 411 of OC: Student Handbook; Student Rights & Responsibilities*  
<http://www.odessa.edu/dept/studenthandbook/handbook.pdf>

## **Scholastic Dishonesty**

Scholastic dishonesty shall constitute a violation of these rules and regulations and is punishable as prescribed by board policies. Scholastic dishonesty shall include, but not be limited to, cheating on a test, plagiarism and collusion.

### **"Cheating on a test" shall include:**

- Copying from another student's test paper
- Using test materials not authorized by the person administering the test.
- Collaborating with or seeking aid from another student during a test without permission from the test administrator.
- Knowingly using, buying, selling, stealing or soliciting, in whole or in part, the contents of an unadministered test.
- The unauthorized transporting or removal, in whole or in part, of the contents of the unadministered test.
- Substituting for another student, or permitting another student to substitute for one's self, to take a test.
- Bribing another person to obtain an unadministered test or information about an unadministered test.
- "Plagiarism" shall be defined as the appropriating, buying, receiving as a gift, or obtaining by any means another's work and the unacknowledged submission or incorporation of it in one's own written work.
- "Collusion" shall be defined as the unauthorized collaboration with another person in preparing written work for fulfillment of course requirements. (Source: *Odessa College Student Handbook*)

## **Special Populations/Disability Services/Learning Assistance**

Odessa College complies with Section 504 of the Vocational Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. If you have any special needs or issues pertaining to your access to and participation in

this or any other class at Odessa College, please feel free to contact me to discuss your concerns. You may also call the Office of Disability services at 432-335-6861 to request assistance and accommodations.

Odessa College affirms that it will provide access to programs, services and activities to qualified individuals with known disabilities as required by **Section 504 of the Rehabilitation Act of 1973 and Title II of the Americans with Disabilities Act of 1990 (ADA)**, unless doing so poses an undue hardship or fundamentally alters the nature of the program or activity. Disabilities may include hearing, mobility or visual impairments as well as hidden disabilities such as chronic medical conditions (arthritis, cancer, diabetes, heart disease, kidney disorders, lupus, seizure disorders, etc.), learning disabilities or psychiatric or emotional disabilities. A student who comes to Odessa College with diagnosed disabilities which may interfere with learning may receive accommodations when the student requests them and submits proper documentation of the diagnosis. A Request for Accommodations form and guidelines for beginning the request process are available in the OC Help Center or on the Odessa College web site

at <http://www.odessa.edu/dept/counseling/disabilities/index.htm>. The college strives to provide a complete and appropriate range of services for students with disabilities such as assistance with testing, registration, information on adaptive and assistive equipment, tutoring, assistance with access and accommodations for the classroom where appropriate. For information regarding services, students with disabilities should contact the Office of Disability Services in the OC Help Center located in Room 204 of the Student Union Building or call 432-335-6433. (Source: *Odessa College Catalog of Courses 2012-2013, page 52*)

## **Dropping a Course or Withdrawing from College**

Students wishing to drop a non-developmental course may do so online using WebAdvisor, at the Wrangler Express, or Registrar's Office. A student wishing to drop a developmental course or withdraw from college should obtain a drop or withdrawal form from the Wrangler Express or the Registrar's Office. Students are encouraged to consult with instructors prior to dropping a class. Students may not completely withdraw from the college by use of the Web. Students must drop a class or withdraw from college before the official withdrawal date stated in the class schedule. Students who are part of the Armed Forces Reserves may withdraw with a full refund if the withdrawal is due to their being ordered into active duty. A copy of the student's orders must be presented to the Registrar's Office at the time of the withdrawal. For details, please contact the Office of the Registrar. **No longer attending class does not automatically constitute withdrawal from that class, nor does a student's notification to an instructor that the student wishes to be dropped. Failure of a student to complete the drop/withdrawal process will result in a grade of "F."** (Source: *Odessa College Catalog of Courses 2012-2013, page 36*)

## **Student Support Services and Technical Support**

---

### **Blackboard Support**

#### **I can't log into my Blackboard Course, who do I contact?**

Contact the Student Success Center: 432-335-6673 or online at [https://www.odessa.edu/dept/ssc/helpdesk\\_form.htm](https://www.odessa.edu/dept/ssc/helpdesk_form.htm). The SSC can provide you with your Blackboard login name. If you are not sure what your password is, they can reset your password.

#### **I'm having a problem in my Blackboard Course, who do I contact?**

For any problem that you have in your online course, always contact your Instructor first. Refer to the Instructor's Contact Information area of the Syllabus for their preferred method of contact and the expected response time.

## Additional Blackboard Help Resources:

Service	Assistance Provided	Available
<b>Blackboard Help for Students</b>	Website with a searchable list of topics on how to navigate and use Blackboard for online courses.	Online <a href="#">Click here.</a>
<b>Blackboard On Demand Learning Center for Students</b>	This website provides an extensive list of short tutorial videos for student activities performed in Blackboard.	Online <a href="#">Click here.</a>
<b>Blackboard Collaborate: First Time Users</b>	If you have never used Blackboard Collaborate before, this website provides a system requirements check, configuration instructions, and training and resources area.	Online <a href="#">Click here.</a>
<b>Blackboard Collaborate: Essentials for Participants</b>	This website provides essential information for Participants of Collaborate sessions. Any Collaborate user, whether first-time or experienced, would benefit from reviewing the information here.	Online <a href="#">Click here.</a>

## Student E-mail Support

**How do I set up, access, or update my Odessa College Student E-mail account?** Go to this website and follow the directions on the page: <http://www.odessa.edu/gmail/>.

### **I can't access my student email! I forgot my password!**

Contact the Student Success Center: 432-335-6673 or online at [https://www.odessa.edu/dept/ssc/helpdesk\\_form.htm](https://www.odessa.edu/dept/ssc/helpdesk_form.htm). They can provide you with assistance in accessing your student email (created by OC) and can also assist with resetting your student email password. Make sure to have your student ID number available!

**Your Blackboard login name is associated with your OC created student email account. All Correspondence for Blackboard courses must be submitted using your Odessa College student email address.**

## Support for Students with Disabilities

**How do I contact the Office of Special Populations?**

<b>Main Number</b>	432-335-6861
<b>Campus Location</b>	SUB 204N in the Student Union Building
<b>Email</b>	Becky Rivera-Weiss - <a href="mailto:brivera@odessa.edu">brivera@odessa.edu</a>
<b>Website</b>	To find out more about services provided by the Special Populations office, please visit: <a href="http://www.odessa.edu/dept/counseling/disabilities/index.htm">http://www.odessa.edu/dept/counseling/disabilities/index.htm</a>

## Learning Resources Center (LRC; Library)

### How do I contact the Learning Resource Center?

<b>Main Number</b>	432-335-6640
<b>FAQ Service</b>	LibAnswers: <a href="http://libanswers.odessa.edu">http://libanswers.odessa.edu</a>
<b>Contact a Specific OC Librarian</b>	Pat Quintero at 432/335-6350 or <a href="mailto:pquintero@odessa.edu">pquintero@odessa.edu</a> Donna Clark at 432/335-6645 or <a href="mailto:dclark@odessa.edu">dclark@odessa.edu</a> Carolyn Petersen at 432/335-6641 or <a href="mailto:cpetersen@odessa.edu">cpetersen@odessa.edu</a>
<b>LRC Services and Guidelines Website</b>	<a href="https://www.odessa.edu/dept/library/services/index.htm">https://www.odessa.edu/dept/library/services/index.htm</a>

### Equipment and Services Provided:

The Murry H. Fly Learning Resources Center (LRC) supports the college's curriculum resulting in a primary emphasis on each student's individual study and research needs. The faculty and staff work with the LRC's Technical Services and Public Services Departments in choosing materials to support all college programs. More than 59,000 books, 50,000 electronic books, 350 current periodicals, 6,700 media holdings, eight newspapers, and 60 databases are available to enhance the educational process.

Equipment/Services Available	Used For	Available
Books, videos, CDs	Research	On Campus and Online
Specialized databases not available online for free	Research	On Campus and Online
Magazines, newspapers, & scholarly journals	Research	On Campus and Online
Computers	Research & word processing	On Campus
Selected textbooks for short-term use	Course work	On Campus
Trained staff	Answer "where do I find...?"	On Campus and Online
Tutorials	Tips for research strategies	On Campus and Online
Photocopiers, VHS/DVD players, FAX service	For course work	On Campus
Quiet study areas	For course work	On Campus

## Student Success Center (SSC) / AVID Center

### How do I contact the Student Success Center?

*Appointments are preferred, but walk-ins will be served as soon as possible.*

<b>Main Number</b>	432-335-6673
--------------------	--------------

<b>Campus Location</b>	1st floor of the Library
<b>Website with Additional Help and Information</b>	<a href="http://www.odessa.edu/dept/ssc/">http://www.odessa.edu/dept/ssc/</a>
<b>Live Online Assistance / Chat</b>	<a href="#">Click Here</a> (If no one is currently available, please put your email and question(s) in the appropriate areas of the form and hit 'send.' Your question(s) will be addressed as soon as an SSC staff member becomes available.)

### Equipment and Services Provided:

The purpose of the Odessa College Student Success Center is to provide assistance to students in meeting their academic and career goals. The SSC strives to continually provide new and updated resources that will empower all Odessa College students to succeed at OC and beyond.

Equipment/Services Available	Used For	Available
Tutoring by CRLA & Avid trained tutors	Understanding course work and motivation	On Campus and Online <a href="#">Click here for more information.</a>
Student Information Seminars (SIS)	Demo email, Blackboard and SSC resources	On Campus and Online <a href="#">Click here for more information.</a>
Study Skills	Tools needed to succeed	On Campus and Online <a href="#">Click here for more information.</a>
Basic Technology	To navigate classes, email, etc.	On Campus and Online
Plato Web	Practice for TEAS test and basic math, science, etc.	On Campus and Online <a href="#">Click here for more information.</a>
Project T.I.E.	Practice for GED/COMPASS	On Campus and Online <a href="#">Click here for more information.</a>
Student Orientation/Tour	Show individual students where their classes will be. SIS presentation	On Campus
M.O.R.E. Mentoring Program	Networking, tips to navigate college life successfully	On Campus <a href="#">Click here for more information.</a>
Smart thinking	Online tutoring service. Connect with an e-structor and interact with a live tutor.	Online <a href="#">Click here for more information.</a>

[information.](#)

## Veterans Support

How do I contact the office for Veteran's Outreach?

<b>Main Number</b>	432-335-6833
<b>Campus Location</b>	204M (Help Center) in the Student Union Building
<b>Email</b>	Gloria Rangel - <a href="mailto:grangel@odessa.edu">grangel@odessa.edu</a>
<b>Website</b>	To find out more about services provided by the Veteran's Outreach office, please visit: <a href="http://www.odessa.edu/dept/counseling/veterans/index.htm">http://www.odessa.edu/dept/counseling/veterans/index.htm</a>