Math 1314 -5055 Syllabus

Course Information

# Instructor contact information

|  |  |  |  |
| --- | --- | --- | --- |
| **Instructor:** | Dr. Chandi Bhandari | **Office Phone:** | TBD |
|  | | | |
| **Office Location:** | TBD | **Office Hours:** | By appointment |
| (or hours of availability) | |
| **E-mail:** | Chandi.bhandari@sjcd.edu |  |  |

# Welcome to

|  |  |  |  |
| --- | --- | --- | --- |
| **Course Title:** | College Algebra | **Term and Year:** | **Fall 2018** |
| **Course Subject:** | MATH |  |  |
| **Course Number and Section:** | *1314 5055* | **Class Days and Times:** | **Tu/Thu 2:30-3:50pm** |
| **Credit Hours:** | 3 |  |  |
| **Lecture Hours:** | 3 | **Class Room Location:** | HSC 2-147 |
| **Lab Hours:** | 0 |  |  |
| **External Hours:** | 0 | **MyMathLab Course ID:** | bhandari65596 |
| **Total Contact Hours:**  **(All hrs. x 16)** | 48 |  |  |

# Course overview

**Catalog Description:**

In-depth study and Applications of Polynomial, rational, radical, absolute-Value, piecewise Defined, Exponential and logarithmic functions, equations, inequalities, graphing skills and systems of equations using matrices. Additional topics such as sequences, series, probability, conics and Inverses may be included.

**Student Learning Outcomes:**

The student will:  
• Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, inverses and piecewise defined functions.   
• Recognize, graph and apply polynomial, rational, radical, exponential, logarithmic and absolute value functions and solve related equations.   
• Apply graphing techniques.   
• Evaluate all roots of higher degree polynomial and rational functions.   
• Recognize, solve and apply systems of linear equations using matrices.   
• Solve absolute value, polynomial and rational inequalities.

**In our efforts to prepare students for a changing world, students may be expected to utilize computer technology while enrolled in classes, certificate, and/or degree programs within LSCS.**

**The specific requirements are listed below:**

**MyMathLab is mandatory and expected before the second class.**

Students may access it temporarily without purchase. Permanent access will require an access code. This comes with new texts or can be purchased separately online or from the bookstore.

[www.mymathlab.com](http://www.mymathlab.com/)

School zip code: 77433

Course ID:  **bhandari65596**

If using your home computer, run the Installation Wizard the first time.

MyMathLab can be accessed from all college computers.

***Inability to access MyMathLab from home is not an excuse for not doing the assigned work****.*

# Getting ready

**Prerequisites:** MATH 0310 or placement by testing

**Co-requisites:** Course May Be Taken As A Corequisite With ENGL 0309 Or ESOL 0365 Or Equivalent

**Textbook Title:** Lial, Hornsby, Schneider, Daniels; Essentials of College Algebra, 11th ed.; Pearson  
**Required MyMathLab Access:** Students must buy an access code to MyMathLab, an online course management system which includes a complete eBook; students will first need a Course ID provided by the instructor in order to register; online purchase of MyMathLab access at [www.mymathlab.com](http://www.mymathlab.com/);

**Optional Hardbound Text:** hard copies of access codes available with ISBN: 9780558357603. Note: A complete eBook for the course comes with MyMathLab access. **A hardbound copy of the textbook is NOT required.**

**Calculator:** Graphing Calculator required. TI 83, TI 84 or TI 86 series calculators recommended. Nspire calculators and calculators capable of symbolic manipulation will not be allowed on tests. Examples include, but are not limited to, TI 89, TI 92, and Nspire models and HP 48 models. Neither cell phones nor PDA’s can be used as calculators.

# Instructor guidelines and policies *Students are responsible for knowing and following the policies related to all of the links below.*

**Attendance:** Attendance is mandatory. Students who are more than 10 minutes late or who leave early may be counted as absent.

Last day to drop & receive a “W” is November 14. It is the student’s responsibility to drop the course.

**Assignments:** Homework will beassigned MyMathLab. Check MML for due dates. MML Homework may not be done after the due date for a grade.

Section worksheets are posted in MML. They should be printed and are due at the beginning of the class after instruction on that section was completed. Late section worksheets (for any reason including absences) will be accepted for half credit.

Practice tests are posted in MML. Complete the practice test, showing all work, on separate paper and submit at the beginning of class on test day.

**Make-up Exams:** There will be no make-up tests except in extreme circumstances. If you miss a test please contact the instructor *before* the next class. If you miss one test, you may submit a written excuse with evidence the day you come back to class and your final exam score will count for the missed test. A second missed test will be given a zero score.

**Electronic devices:** Must be silenced and away during lectures. Cell phones may not be used as calculators.

***Tests:*** *Students must turn in their test before leaving the classroom, and will not be allowed to return and continue to work on the test. Calculators may be cleared before tests. Absolutely no phones or computer watches allowed during tests.*

**Department/Division Contact:** 281-290-5279

**Grade Determination:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Your grade will be determined by the following** | **Details** | **Points**  (if applicable) | **Percent of Final Average** |
| Class participation | Includes group & individual assignments, & participation. |  | 10% |
| Homework | 4 Homework |  | 20% |
| Attendance | Perfect attendance gets full point and reduces according the number of absences |  | 5% |
| Tests | 3 tests will be given in class | 15% each | 45% |
| Final Exam | Exam will be comprehensive |  | 20% |
| **Total:** | |  | 100% |

## Final Examinations

A final evaluation activity will occur during the published final evaluation period. The appropriate dean must approve any variation to this schedule. <http://www.lonestar.edu/examschedule.htm>

**Letter Grade Assignment:**

|  |  |
| --- | --- |
| Letter Grade | **Final Average in Percent** |
| A | 90-105% |
| B | 80-89% |
| C | 70-79% |
| D | 60-69% |
| F | Below 60 % |

# Tentative Instructional Outline:

|  |  |  |
| --- | --- | --- |
| Date | **Activities  and Assignment** | Objectives  and Details |
| Aug 28 | Introduction (Hw1 begin)1.3a | Introduction and Complex numbers |
| 30 | 1.3 and 1.4 | Complex number and quadratic Function |
| Sept 4 | 1.4 | Quadratic functions |
| 6 | 1.5 | Applications and modeling |
| 11 | 1.6 | Other Types of Equations |
| 13 | 1.7 | Inequalities |
| 13 | 1.8 | Absolute value equations and Inequalities |
| 18 | 2.1 &2.2 (Hw1due and Hw2 begin) | Circles |
| 20 | 2.3 | Functions |
| 25 | 2.3 | Equation of lines |
| Sept 27 | TEST 1 |  |
| Oct 2 | 2.6a | Graphs of Basic Functions |
| 4 | 2.6b | Graphs of Basic Functions |
| 9 | 2.7a | Graphing Techniques |
| 11 | 3.1a (Hw2 due and Hw3 begin) | Quadratic Functions & Models |
| 16 | 3.1b | Quadratic Functions & Models |
| 18 | 3.2 | Synthetic Division |
| 23 | 3.3 | Zeros of Polynomial Functions |
| 25 | 3.4a | Polynomial Functions: Graphs, Applications |
|  | 3.4b | Polynomial Functions: Graphs, Applications |
|  | 3.5 | Rational Functions: Graphs, Applications |
| Oct 30 | TEST 2 (Hw3 Due ) |  |
| Nov1 | 4.1(Hw4 begin) | Inverse Functions |
| 6 | 4.2a | Exponential Functions |
| 8 | 4.2b | Exponential Functions |
| 13 | 4.3 | Logarithmic Functions |
| 15 | 4.4 | Evaluating Logarithms & Change-of-Base |
| 20 | 4.5a | Exponential & logarithmic Equations |
|  | 4.5b | Exponential & logarithmic Equations |
|  | 4.6 | Applications of Exponential Growth, Decay |
| Nov 29 | Test 3 |  |
| Dec 4 | 5.1 | Systems of Linear Equations |
|  | 5.2 | The Gauss-Jordan Method  Special Systems |
| Dec 6 | (Hw4 Due) |  |
| Wed  Dec | **FINAL** | 2:30-3:50pm |

## Last Day to Drop and Receive a “W”: *(November 14, 2018)*

## Withdrawal Policy

Withdrawal from the course after the official day of record and prior to the [“W” Day](http://www.lonestar.edu/academic-calendar.htm) will result in a final grade of “W” on your transcript. You are strongly encouraged to meet with your professor prior to withdrawing from a course to consider all options. No credit will be awarded for a course earning a “W.” If you stop attending class, you must withdraw at the registration office prior to “W” day. If you stop attending class and do not officially withdraw, you will receive whatever grade is calculated based on your completion rate, which could result in an “F” for the course.

## Six Drop Rule

Students who enrolled in Texas public institutions of higher education as first-time college students during the Fall 2007 term or later are subject to section 51.907 of the Texas Education Code, which states that an institution of higher education may not permit a student to drop (withdraw with a grade of “W”) from more than six courses, including courses that a transfer student has previously dropped at other Texas public institutions of higher education that have already been counted against their [six drop limit](http://www.lonestar.edu/course-drops.htm).  Students should fully understand this drop limit before they drop any course. Please see a Counselor or Advisor in our Student Services area for additional information and assistance. **Dropping a transitional and/or ESOL course does not count against the six drop limit.**

## Evaluation of Instruction

Lone Star College-CyFair is committed to acting intentionally about student success. As part of our institutional effectiveness efforts, our instructors are assessed in several ways. For the continuous improvement of our instruction, you are encouraged to provide input for each course you take each semester using the Course Evaluations Questionnaire, which can be accessed through your myLoneStar account. This occurs approximately half way through your course, and you will be notified when surveys are available for completion. Instructions on how to access and complete the Course Evaluations Questionnaire can be found by logging into your [myLoneStar Account](https://my.lonestar.edu/lsclogin.jsp) and clicking on the Quicklinks – “How To” Documents. The college deans review these evaluations each semester. Additionally, the deans and/or department chairs may visit each instructor’s class at some time during the semester to observe the instructional environment being provided and complete an assessment of the instructor.

# Student Support Services **Lone Star College-CyFair is committed to your success! One of our cultural beliefs is** [**Students Matter**](http://www.lonestar.edu/OrgDev-2020.htm)**!**

If you are experiencing challenges achieving your goals academically or personally, please contact your advisor, instructor, or another individual on campus you trust. Advisors can provide assistance with questions related to academics, while the Counseling office can assist with ADA accommodations and personal barriers. All concerns related to classroom instruction must first be addressed with the instructor. Please know that we have resources and are here to support you.

## **Academic Success Center** (Barker Cypress Campus - Learning Commons - 2nd Floor)

The Academic Success Center (ASC) offers [tutoring](mailto:http://www.lonestar.edu/tutoring-cyfair.htm) for most disciplines and specific assistance in The Science Center (LRNC 203), Math Center (LRNC 205) and the Writing Center (LRNC 208).  Student success seminars are also offered throughout the semester. For more information, please visit the [Academic Success website](mailto:http://www.lonestar.edu/learning-cyfair.htm) or call 281.290.3279.

## **Academic Success Center open labs** (TECH 104, CASE 104 and CASA 223)

The Academic Success Center Open Labs are quiet work and study areas available to you. You access the labs with your LSC ID card. The ASC Open Labs are available during extended hours during all semesters. Basic software assistance, access to Mac and PC computers loaded with courseware, printing, copying, and scanning are available in TECH 104, CASE 104 and CASA 223. For more information, please visit the [Academic Success website](http://www.lonestar.edu/learning-cyfair.htm), contact 281.290.5980, or [cfasclabs@LoneStar.edu](mailto:cfasclabs@LoneStar.edu).

**Americans with Disabilities Act Statement (Disability Services)**

Lone Star College- CyFair is dedicated to providing the least restrictive environment for all students.   We promote equity in academic access through the implementation of reasonable accommodations as required by the Rehabilitation Act of 1973, Title V, Sections 504 and 508, the Americans with Disabilities Act of 1990 (ADA), and the Americans with Disabilities Amendment Act (ADAAA).  These laws enable students with disabilities to participate in and benefit from all post-secondary educational courses and activities.

A student requesting accommodations for a disability must contact the Counseling/Disability Services Office and register for services. The Assistive Technology Lab is available for students who benefit from its various technologies to convert text to speech, magnify items, convert text to Braille, etc. after their accommodations have been determined by the Counseling office. If possible, the student requesting services should make an initial contact with the office at least 4 weeks prior to the start of the first class.  Any disability related documentation and requests for assistive technology should be submitted to the Disability Services office, which is located on the LSC-CyFair campus in CASA 109. You may contact Stephanie Dillon, Disability Services Counselor, at 281-290-3260 or 281-290-3533 or [Stephanie.G.Dillon@LoneStar.edu](mailto:Stephanie.G.Dillon@LoneStar.edu) for additional information and/or to schedule an appointment.   Additional information may be accessed online at <http://www.LoneStar.edu/disability-services.htm>

## Counseling Services

Counseling services are available to students who are experiencing difficulty with academic issues, selection of college major, career planning, disability accommodations, or personal issues. You may contact [Counseling, Career, and Disability Services](http://www.lonestar.edu/counseling-services.htm) at 281.290.3260, [CyFair.Counseling@LoneStar.edu](mailto:CyFair.Counseling@LoneStar.edu) or stop by CASA 109 to make an appointment.

Students may contact counseling services at the Fairbanks Center or Cypress Center. The Fairbanks Center contact is 832.782.5110, [Fairbanks.counselor@LoneStar.edu](mailto:Fairbanks.counselor@LoneStar.edu), or FBC 120. The Cypress Center contact is 832.920.5029, [Lolita.B.Page@LoneStar.edu](mailto:Lolita.B.Page@LoneStar.edu), or CYC, or 100B.

## Library

The Lone Star College-CyFair Library is located in the Learning Commons (LRNC) building and contains informational resources for both college students and community members. Not only is the library an academic library, but it is also a branch of the Harris County Public Library. Librarians are professionally trained to assist you with any aspect of research during operating hours including using the library, locating and evaluating information sources, and citing information sources. The Library contains over 125,000 books, online information databases, 185 computers, free wireless internet, and many more information/research related amenities to ensure student success.

## Library Resources

You may access library services via:

* Phone: Circulation Desk 281-290-3210 and Reference Librarians 281-290-3214 or 281-290-3219
* Email: [CyFairLibrary@LoneStar.edu](mailto:CyFairLibrary@LoneStar.edu)
* Text: 832-463-0478
* Chat: LoneStar.edu/library
* Online: LoneStar.edu/library/cyfair
* myLoneStar: Log in to my.LoneStar.edu with your LSC Student ID number and password to access library services from the high school campus location, home, or any location with Internet services to search catalog, view library account, research databases, and more.

For more information on how to find locations, check library hours, borrow library materials, research a topic, discover other library services, and/or find research apps and tools, please visit, “How Do I…?” at <http://www.LoneStar.edu/library/how-to.htm>. This page provides additional information to learn how to get a library card, find and request books, videos, CDs, articles and more, check your library account, access e-books and digital downloads, search databases for articles, periodicals (magazines, newspapers, and journals), cite sources, locate research guides, and various other topics.  

## Veteran Affairs Center Services

The Lone Star College Veterans Affairs Center located in CASE 110 provides services to all veteran students and their family members from our five colleges including LSC-CyFair, LSC-Kingwood, LSC-Montgomery, LSC-North Harris, and LSC-Tomball, five centers, LSC-University Park, LSC-University Center at Montgomery, LSC-University Center at University Park, Lone Star Corporate College, and LSC-Online. Information is available at <http://www.LoneStar.edu/veterans-affairs.htm>.

## The Empowerment Center

The Empowerment Center is a resource center for every student. We welcome all students to our home in CASA 121 where faculty and staff volunteers provide guidance in accessing campus resources, including the [Food for Thought Food Pantry](mailto:http://www.lonestar.edu/cyfair-food-pantry.htm) and the Career Closet.

# Lone Star College-CyFair Campus Policies

We encourage students to read the [Student Handbook](http://www.lonestar.edu/departments/advising/LSCS_Student_Handbook_Web.pdf) and [LSC Catalog](http://www.lonestar.edu/lscs-catalog.htm) for a comprehensive list of policies and procedures.

## Student Behavior Expectations

You are expected to conduct yourself appropriately while on College property or in an online environment. You may receive disciplinary actionup to and including suspension, if you violate College rules, disrupt classes, or interfere with the opportunity of others to obtain an education. Students who pose a threat to the safety of others will be subject to immediate withdrawal from the classroom,campus environment, and/or online environment, as well as face subsequent criminal charges, as appropriate. Please refer to the [Student Code of Conduct](http://www.lonestar.edu/student-responsibilities.htm) for additional information.

## Academic Integrity

Lone Star College-CyFair is committed to a high standard of academic integrity in the academic community. In becoming a part of the academic community, you are responsible for honesty and independent effort. Please read the [Academic Integrity Policy](mailto:http://www.lonestar.edu/instructional-resources.htm) online and read the [Academic Integrity Brochure](http://www.lonestar.edu/departments/libraries/academic_integrity_brochure.pdf) for more information.

**Academic Appeals**

An academic appeal is a formal request by a student to change a grade or to challenge a penalty imposed for violations of standards of academic integrity such as plagiarism or cheating. Before a student brings an academic appeal, he or she should first meet with the instructor to request that a change be made. For additional information, please read the [Academic Complaint and Appeal Process](http://www.lonestar.edu/academic-appeal.htm).

## Campus Safety and Security

Lone Star College is committed to maintaining the safety of the students, faculty, staff, and guests while visiting one of our campuses. To help ensure your safety during an emergency (safety, fire, severe weather, etc.), please follow the instructions of college officials.  Safety information and resources may be found on the

[Office of Emergency Management](http://www.lonestar.edu/oem.htm) website and are also posted in each classroom. In the event you wish to report an emergency, please contact the police at 281.290.5911 or utilize the red handled emergency phones located in classrooms.

The Texas Legislature enacted campus carry by passing Senate Bill 11, effective at LSC on August 1, 2017. For more information about Campus Carry, visit the LSC [Campus Carry](http://www.lonestar.edu/campuscarry) website.

## FERPA

The Family Educational Rights and Privacy Act (FERPA), also known as the Buckley Amendment, was established to protect the privacy rights of all students and applies to any educational facility receiving federal funds. For more information and the release form, please visit <http://www.lonestar.edu/ferpa.htm>.

## Equal Opportunity Statement

Lone Star College is committed to the principle of equal opportunity in education and employment. Lone Star College does not discriminate on the basis of race, color, gender, religion, disability, age, veteran status, sexual orientation, nationality or ethnicity in its programs and activities.

## Student Absence on Religious Holy Days

The student must notify the faculty member in writing within the first 12 days of the semester of the intent

to be absent due to a religious holy day. Under Texas Education Code 51.911, a student who is

absent from classes for the observance of a religious holy day shall be allowed to take an examination

or complete an assignment scheduled for that day within a reasonable time as established by the faculty member.

## Guidelines for Children of College Students

Children of students may not enter the classroom, even for brief visits, without the instructor’s prior express written permission and may never enter lab areas. See [Board Policy Section II.D.2.04 and Section II.D.2.06](http://www.lonestar.edu/student-community-facilities.htm) for more information.

## Syllabus Disclaimer

It is the instructor’s right to modify the class schedule when necessary and cover course topics as he/she feels is necessary to meet the learning outcomes, therefore this syllabus is subject to change.