Mathematics 104A-05 Precalculus: Algebra

Winter 2015  MW 11:40 am – 1:20 pm  (SH C-173)

Instructor: Sheng (Sharon) Hung
Office: SH C-357
Office hours: TuTh 11:25 – 12:45
Tutorial center hours: MTuWTh 10:45 – 11:25
Tutorial center phone: 323-343-5374
Email: shung5@calstatela.edu

Final Exam: Monday, March 16, 10:45 am – 1:15 pm

Prerequisite: Score of 50 or more on (or exemption from) ELM or Math 091 with a minimum C grade or satisfactory score on placement examination.


Topical outline: Functions; exponential and logarithmic functions; polynomials and rational functions; systems of linear equations and matrices; sequences and series including arithmetic and geometric series.

Student learning outcomes: Students who successfully complete this course will be able to:

- Find the domain and range of a function, apply transformations to functions, compose functions, find the inverse of a 1-1 function.
- Graph, compute, and apply exponential and logarithmic functions; expand and combine logarithmic expressions; use the laws of logarithms; solve exponential and logarithmic equations.
- Graph polynomial functions; find the roots (zeroes) of a polynomial function; understand the rational roots theorem; factor a polynomial into linear factors.
- Solve systems of linear equations using Gaussian elimination.
- Understand matrix algebra, including adding, subtracting, and multiplying matrices.
- Graph rational functions.
- Understand how to work with sequences including geometric and arithmetic sequences.

Requirements:

Grading system:

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<th>Attendance/Participation</th>
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<th>Online homework</th>
<th>Tests</th>
<th>Final</th>
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<tr>
<td></td>
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<td>100</td>
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This course is graded ABCDF

900 - 1000 A  800 - 899 B  680-799 C  580 - 679 D  below 580 F

ADA statement: Reasonable accommodation will be provided to any student who is registered with the Office of Students with Disabilities and requests needed accommodation.
**Academic honesty statement:** Students are expected to do their own work and to abide by the University Policy on academic honesty, which is stated in the Schedule of Classes. Copying the work of others, cheating on exams, and similar violations will be reported to the University Discipline Officer, who has the authority to take disciplinary actions against students who violate the standards of academic honesty.

**Student responsibilities:** Students are responsible for being aware of all announcements that are made in class, such as changes in exam dates, due dates of homework and papers, and cancellation of class due to instructor’s absence. Students are responsible for announcements made on days that they are absent.

Students must check their CSULA email account regularly for information from the instructor and the Department. Failure to do so may result in missed deadlines or other consequences that might adversely affect students. Note that you can forward this email account to any other account of your choosing.

**Exit exams:** If you feel that you should be in a higher-level math class, you can take the Math 104A exit exam in the University Testing Center (library south, second floor) any time before the add deadline. If you pass the Math 104A exit exam, then you will be permitted to enroll in any course that Math 104A is the prerequisite for, *provided that you do so within one year*. After the add deadline, you will not be able to take the exit exam again for this course unless it has been over one year since you have last taken Math 104A or the exit exam. Contact the Testing Center (x3-3160) for more information.