

Math 1400: Pre-Calculus, Spring 2018

Course Information

Course Title: Pre-Calculus
Meeting times: MWF 11:00-11:50, PRH 10
Credit hours: 3
Pre-requisites: A minimum of C⁻ in Math 1200

Instructor Information

Name: Anitha Srinivasan
Contact: anitha.srinivasan@slu.edu
Office Hours: Mon, Tues, Wed, Fri: 12:00 to 12:50
Office: Math Office, PAH, 1st floor.
Phone Number: 915545858 Ext: 299

Course objectives and description

The main objectives of this course are to sharpen the student's knowledge and skills involving basic functions and their properties, and to introduce the topic of Trigonometry. The course starts with a brief review of rational and polynomial functions, followed by a quick look at logarithmic and exponential functions and their applications to word problems. Trigonometric functions are studied in detail along with their applications to real life problems. Some topics in Analytic Geometry such as conic sections, polar coordinates and parametrization of curves will also be studied.

Course Outline

- Review of Polynomial and Rational functions
- Logarithmic and exponential functions and their applications to real life problems
- Trigonometry
 - The unit circle and Trigonometric functions
 - Trigonometric identities
 - Inverse trigonometric functions
 - Graphs of trigonometric functions and their inverses
 - Trigonometric equations

- Applications of trigonometry to real life problems
- Analytic Geometry
 - Parametric equations
 - Polar coordinates.
 - Conic sections

Text Book

Precalculus, Mathematics for Calculus (sixth ed.), Stewart, Redlin and Watson, S. Thomson-Brooks/Cole.

Attendance

Attendance is compulsory. All absences must be justified.

Student Learning Outcomes

On successful completion of the course the student will have the following abilities.

- To solve application problems using logarithmic, exponential and trigonometric functions.
- To work with trigonometric identities in terms of proving them and using them to solve equations.
 - To solve trigonometric equations using a variety of methods.
 - To graph curves in polar coordinates.
 - To work with polar and rectangular coordinates.
 - To solve application problems based on conic sections.

Make up exams

A makeup exam will be given only if an exam is missed due to an excused absence (see paragraph below).

Excused absences

Legitimate conflicts and excuses require written documentation and are limited to serious health related problems in the immediate family that affect the student directly, a student's illness that requires immediate doctor's care (with the corresponding doctor's note), a University sponsored event (except club sports) and regularly scheduled religious obligations. Excuses that will NOT be considered include personal travel arrangements, non-University

sponsored events, a conflicting appointment, or an illness that does not prevent the student from coming to the exam.

Grading system

The final grade will be obtained as follows:

- 15% In-class quizzes
- 25% First midterm exam
- 25% Second midterm exam
- 35% Final exam (comprehensive)

Course calendar

Please check the [Calendar](#) regularly where all important dates are given including midterm exam dates, drop dates etc. In particular note the following dates.

- Last day to drop/add a class without a W grade: January 21
- Last day to drop a class and receive a W grade: March 9
- Registration for Fall 2018 semester begins on April 4
- Midterm 1: Friday, February 9 at 2:00
- Midterm 2: Friday, April 13 at 2:00
- Final Exam: May 8, 9:30 to 11:30

Academic honesty

The University's Academic Integrity Statement:

Academic integrity is honest, truthful and responsible conduct in all academic endeavors. The mission of Saint Louis University is "the pursuit of truth for the greater glory of God and for the service of humanity." Accordingly, all acts of falsehood, demean and compromise the corporate endeavors of teaching, research, health care and community service via which SLU embodies its mission. The University strives to prepare students for lives of personal and professional integrity, and therefore regards all breaches of academic integrity as matters of serious concern.

The governing University-level Academic Integrity Policy can be accessed on the Provost's Office website at: [Academic Integrity Policy](#). Additionally, SLU-Madrid has posted its academic integrity policy online [available here](#). As a member of the University community, you are expected to know and abide by these policies, which detail definitions of violations, processes for reporting violations, sanctions and appeals. The professor will review these policies during the first weeks of the term: please direct questions about

any facet of academic integrity to your professor, the chair of the department of your academic program or the Academic Dean of the Madrid Campus.

Academic Accommodations and Learning Resources

In recognition that people learn in a variety of ways and that learning is influenced by multiple factors (e.g., prior experience, study skills, learning disability), resources to support student success are available on campus. Students who think they might benefit from these resources can find out more about:

Course-level support (e.g., faculty member, departmental resources, etc.) by asking your course instructor. University-level support (e.g., tutoring/writing services, Disability Services) by visiting the Academic Dean's Office (San Ignacio Hall)

Students with a documented disability who wish to request academic accommodations must contact Disability Services to discuss accommodation requests and eligibility requirements. Once successfully registered, the student also must notify the course instructor that they wish to access accommodations in the course. Please contact Disability Services at disabilityservices-madrid@slu.edu or +915 54 58 58, ext. 230 for an appointment. Confidentiality will be observed in all inquiries. Once approved, information about the students eligibility for academic accommodations will be shared with course instructors via email from Disability Services. For more information about academic accommodations, see Student Resources on the SLU-Madrid webpage.

Note: Students who do not have a documented disability but who think they may have one are encouraged to contact to Disability Services.

Title IX Statement

Saint Louis University and its faculty are committed to supporting our students and seeking an environment that is free of bias, discrimination, and harassment. If you have encountered any form of sexual misconduct (e.g. sexual assault, sexual harassment, stalking, domestic or dating violence), we encourage you to report this to the University. If you speak with a faculty member about an incident of misconduct, that faculty member must notify SLU's Title IX deputy coordinator, Marta Maruri, whose office is located on the ground floor of Padre Rubio Hall, Avenida del Valle, 28 (mmaruri@slu.edu; 915-54-5858, ext. 213) and share the basic fact of your

experience with her. The Title IX deputy coordinator will then be available to assist you in understanding all of your options and in connecting you with all possible resources on and off campus.

If you wish to speak with a confidential source, you may contact the counselors at the SLU-Madrid's Counseling Services on the third floor of San Ignacio Hall (counselingcenter-madrid@slu.edu; 915-54-5858, ext. 230) or Sinews Multipletherapy Institute, the off-campus provider of counseling services for SLU-Madrid (www.sinews.es; 917-00-1979). To view SLU-Madrid's sexual misconduct policy and for resources, [click here](#).

Information regarding collection of student work for assessment

Saint Louis University - Madrid Campus is committed to excellent and innovative educational practices. In order to maintain quality academic offerings and to conform to relevant accreditation requirements, we regularly assess our teaching, services, and programs for evidence of student learning outcomes achievement. For this purpose we keep on file "anonymized" representative examples of student work from all courses and programs such as: assignments, papers, exams, portfolios, and results from student surveys, focus groups, and reflective exercises. Thus, copies of your work for this course, (e.g. any exams or assignments) may be kept on file for institutional research, assessment and accreditation purposes. If you prefer that Saint Louis University-Madrid Campus does not keep your work on file, you will need to communicate your decision in writing to your professor.