DE LA SALLE UNIVERSITY
College of Science
Department of Mathematics

NUMEANL– *Numerical Analysis*
Prerequisite: MATH115, LINEALG/MTRXTHE   *Co-Requisite: DIFEQUA*

Instructor:_____   Contact details: _____
Consultation Hours:_____   Class Schedule and Room:_____

Course Description

NUMEANL is a course for mathematics and statistics majors. It introduces the students to numerical methods of approximating solutions to different classes of mathematics problems. It is designed to provide the students with real-life approaches to solving problems for which closed form solutions are not feasible.

Learning Outcomes

On completion of this course, the student is expected to present the following learning outcomes in line with the Expected Lasallian Graduate Attributes (ELGA)

ELGA	Learning Outcome
Critical and Creative Thinker Effective Communicator Lifelong Learner Service-Driven Citizen	At the end of the course, the student will be able to apply the appropriate mathematical concepts, well-known results, thinking processes, tools and technologies in solving various conceptual or real-life problems, whenever possible.

Final Course Output

As evidence of attaining the above learning outcomes, the student is required to submit the following during the indicated dates of the term.

Learning Outcome	Required Output	Due Date
At the end of the course, the student will be able to apply the appropriate mathematical concepts, well-known results, thinking processes, tools and technologies in solving various conceptual or real-life problems, whenever possible.	f	Week 13

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Portfolio of Computer Laboratory Exercises

CRITERIA

40%	The submitted work includes all the prescribed exercises and the required parts of the solutions.	The submitted work has a few omissions but includes at least 85% of the prescribed exercises and the required components of the solutions.	The submitted work has some omissions but includes between 70%-84% of the prescribed exercises and the required components of the solutions. Certain aspects are either incomplete or incorrect.	work contains many omissions and satisfies less than 70% of the exercises and the required components of the solutions.
45%	The submitted work implemented the prescribed methods correctly and showed the correct results to all exercises.	The submitted work	The submitted work partially manifests the required qualities. Certain aspects are either incomplete or incorrect.	

Organization 15%	The write-ups for the laboratory exercises are all in order, and follow the prescribed format.	The write-ups for the laboratory exercises have minor errors and the prescribed format is followed in at least 85% of the items in the portfolio.	The write-ups for the laboratory exercises contain occasional errors and the prescribed format is followed in 70-84% of all write-ups.	The write-ups for the laboratory exercises contain occasional errors and the prescribed format is followed in less than 70% of the exercise write-ups.

Group Written Report

CRITERIA	EXCELLENT	VERY GOOD	SATISFACTORY	NEEDS IMPROVEMENT
Content and Accuracy (55%)	In-depth and insightful discussion was used throughout the report Supporting details were provided whenever necessary and appropriate Mathematical terms, concepts and results presented are correct throughout	Sufficient supporting details Mathematical terms, concepts and results presented are correct in most parts of the report.	Details are given but inadequate to support the topic Mathematical terms, concepts and results presented are correct in the majority of the report	Most of the details irrelevant Errors in the use of mathematical terms, concepts and results were noted in a major portion of the report.
Organization and Presentation (35%)	Logical sequencing of information throughout Excellent choice of examples and illustrations to enhance and clarify the discussion Clear and effective concluding paragraph	Logical sequencing of information most of the time Appropriate use of examples and illustrations Clear and effective concluding paragraph with very minor errors No grammatical error noted	Logical sequencing of information in some parts of the output. Some of the examples and illustrations used are appropriate. Clear concluding paragraph but lacks effectiveness Between one and three errors were noted	Improper sequencing of information in a substantial part of the report Maexamp.45 218.65aT

Grading System

Final Course Output: 5 %
Skills Check   65%
Final Exam   30%.
TOTAL   100%
Passing Grade: 60%

Students who get at least 89% in every quiz are exempted from taking the final examination. Their final grade will be based on the average of their quizzes and other prefinal course requirements. The final grade of exempted students who opt to take the final examination will be based on the prescribed computation of final grades inclusive of a final examination. Students who missed and/or took any special/make-up quiz will not be eligible for exemption.

Learning outputs are required and not optional to pass the course.

Mobile phones and other forms of communication devices should be on silent mode or turned off during class.

Students are expected to be attentive and exhibit the behavior of a mature and responsible individual during class. They are also expected to come to class on time and prepared.

Sleeping, bringing in food and drinks, and wearing a cap and sunglasses in class are not allowed.

 Students who wish to go to the washroom must politely ask permission and, if given such, they should