

Department Profile

The Department of Mathematics of Sri Guru Nanak Dev Khalsa College was established in 1974.

The Department of Mathematics aims on improving the teaching and research standards and work for all-round development of students to prepare them well for their scientific and social life and make them productive citizens.

The department aims to provide a sustainable environment to students in which they can learn to develop the attitude and ability to apply mathematical methods and ideas in their chosen professions.

Courses Taught:

- i. B.Sc. (Hons.) Mathematics (3 year) (introduced in 2017).
- ii. Mathematics to B.A. (Programme) (3 year).
- iii. Generic Elective Mathematics is offered to all honours students in all departments.
- iv. Business Mathematics is taught to students of Commerce Department.

Papers Taught

B.Sc. (Hons.) Mathematics

1. Calculus
2. Algebra
3. Real Analysis
4. Differential Equations
5. Theory of Real functions
6. Group Theory 1
7. Multivariate Calculus
8. Partial Differential Equations
9. Riemann Integration and Series of functions
10. Ring Theory and Linear Algebra 1

11. Metric Spaces
12. Group Theory 2
13. Complex Analysis
14. Ring Theory and Linear Algebra 2
15. Probability Theory
16. C++ Programming
17. Linear Programming
18. Numerical Analysis

B.A.(Prog.) Mathematics

1. Calculus
2. Algebra
3. Analytic Geometry and Applied Algebra
4. Analysis
5. Discrete Mathematics
6. Differential Equation

Generic Mathematics

1. Calculus
2. Linear Algebra
3. Differential Equations
4. Elements of Analysis

Skill Enhancement Courses (SEC)

1. Computer Algebra Systems
2. Mathematical typesetting system: LATEX
3. Transportation and Network Flow Problems
4. Statistical Software: R

Events and Activities

Departmental Society: **Asankh**

Asankh - The Mathematics Society of Sri Guru Nanak Dev Khalsa College is an initiative towards providing a platform to the students where not only they learn but enjoy mathematics. The society's primitive endeavors are to provide a handful of activities that build and shape the overall nourishment of one's character.

- On 2nd June 2021, Open Mic was held for first years. The freshers displayed their talents and were applauded for their enthusiasm and jolly approach.
- On 22nd January, 2020, the society organized the movie screening followed by a quiz based on the movie "A Beautiful Mind" based on an asocial mathematician.
- On 9th January 2020, Math-bola aka mathematical tambola was held. It was a normal tambola game, but instead of calling out the numbers directly, simple mathematical expressions were given to solve.
- On 8th November, 2019, Math-o-charades aka mathematical dumb charades was played. In Mathematical Dumb Charades the words to be acted out and guessed were mathematical.
- On 30th October, 2019 the departmental society organized valedictory session of Dr. Jagjeet Kaur, Head of Department, Mathematics department, Sri Guru Nanak Dev Khalsa College.
- On 6th October 2019, the inaugural ceremony of Asankh was held. Dr. Manmohan Kaur, former principal of SGND Khalsa college was chief guest and she delivered a talk on the topic - Basic applications of mathematics in daily life .

- On 11 February 2019, **PANACEA**-The Annual mathematics fest was organized with great pomp and show. The following events were held in PANACEA :
 - a. Brain-o-matics the mathematics quiz.
 - b. Pictionary, the mathematical charades, a fun activity with overwhelming response from the participants.
 - c. The Funhouse Cafe, a game on probability using cards and dices.
 - d. Completing the gauntlet, the treasure hunt based on the theme of magazine series marvels.

- On 24th January 2019, **Paper Presentation** was conducted with some exciting and enlightening papers which were discussed. The topics included the beauty concepts of Fibonacci, mathematics in music etc.

- On 21st January 2019, the society organized an **excursion** to the Pratapgarh farms for the Department of Mathematics.

- On 2nd November 2018, the society organized the **movie screening** following a questionnaire based on the movie "The Imitation game" based on coding and deciphering. The event turned out to be very intriguing.

- On 10th October 2018, the **inaugural ceremony** of Asankh was held. Dr. J.K. Thukral, Head of Department, Mathematics Department, Sri Ram College of Commerce delivered a talk on the topic Volume of surface revolution.