## NEWSLETTER



Volume-4 2023-24

## Department of Mathematics

"Mathematics is, in it's way, The poetry of Logical Ideas" Elbert Einstein

### Introduction

Welcome to the Mathematics Department at Forman, where we strive to foster a deep appreciation for the beauty and power of Mathematics.

Our Mission is to providing a comprehensive education that equips the students with the analytical and problem-solving skills necessary for success in a variety of careers and academic pursuits.

The Mathematics Department takes pride in our distinguished faculty, who are passionate about both teaching and research. They are committed to mentoring students and fostering a supportive learning environment.

The Department of Mathematics is a vibrant and dynamic community where students can thrive academically and personally.

# Message from the Head of Department

Greetings!

The Mathematics Department presents its fourth Annual Newsletter for the academic session 2023-2024.

This edition showcases the department's

rative activities and services to the Forman Community.

I am thrilled to share the following exciting developments happened at our department.

**Prestigious Award of College:** The Best Teacher Award is a jewel in the Crown of the Mathematics Department.

Crash Course Program: The Mathematics Department organized the first-ever Crash Course Program at Forman, it was an intensive academic initiative aiming to improve BISE Results.

Capacity Building Sessions: Believing in continuous Professional Development, Department of Mathematics organized many sessions to enhance Teaching and Learning.

Active Participation in Sci-Novation: Just like last year, we show-cased the Diversity of Mathematics at Sci-Novation, 2023 and one of the winning poster was of the Mathematics student.

The Department of Mathematics is highly committed to fostering high standards of academic excellence and embodies the FCC core values that make our community unique.

I wish everyone a wonderful summer break and look forward to an eventful year a head

### SERVICES & RESPONSIBILITIES

#### Sana Bhatti Lecturer

#### Mr. Muhammad Iqbal Associate Professor



- Head of Department
- Sports Council Member
- Member Proctorial Board
- Member Sci-Novation
- Member Search/Scrutiny Committee Computer Science
- Convenor of College Safety Committee

### Exam CoordinatorDept.Coordinator

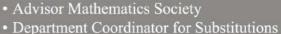
- Dept.Coordinator of Academic Quality Assurance
- Member Commencement Committee
- · Member Proctorial Board
- Member Search/Scrutiny Committee Commerce

#### Dr. Mohsin Raza Assistant Professor



#### Dr. Rabia Naz Associate Professor





- Member Search/Scrutiny Committee
- Member Stage & Award Committee at Commencement
- · Volunteer at Staff Club
- Convener Sci-Novation Media & Publishing committee
- Memeber Admission Information Desk
- Member College Quality Assurance Committee

### Member Proctorial BoardMember Search/Scrutiny Committee

In-charge Professional Development

### Mr. Bilal Ahmed Assistant Professor



- Editor News Letter
- · Member Proctorial Board
- Member Admission Information Desk
- Incharge of Departmental Activities
- Member College Event Management Committee
- Member Proctorial Team at Commencement
- Member College Quality Assurance Committee
- Convener Sci-Novation Protocol Committee

#### Mr. Sharoon Anjum Assistant Professor



- Coordinator 2nd Year
- Member Merit Scholarship Committee
- · Member Proctorial Board
- Member Annual Photograph Committee
- Member English & Urdu Play Organizing Committee

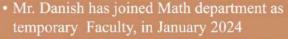
#### Dr. Khalida Faisal Assistant Professor



#### · Coordinator 1st Year

- · Co-Editor Newsletter
- · Member Admission Information Desk
- Member Commencement Committee

## Mr. Danish Masih Temporary Faculty



- Mr. Danish holds a BS in Mathematics from the University of Sargodha in 2017.
- He has 6 years of Experience as Mathematics teacher at Cathedral Higher Secondary School

### HONOR AND AWARDS

# Outstanding Teacher Award



Mr. Bilal Ahmed got the Outstanding Teacher Award 2024

### Promotion



Mr. Sharoon Anjum Promoted from Lecturer to Assistant Professor

# Sci-Novation Poster Competition



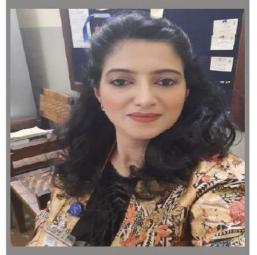
The student of Ms. Rabia Naz got the 1st Position in Poster Competition

### Promotion



Dr. Rabia Naz
Promoted from Assistant
Professor to Associate
Professor

### Portfolio



Ms. Sana Bhatti has been appointed as Head of Mathematics Department

# Faculty Badminton Championship



Mr. Bilal Ahmed & Dr.
Umar Bhatti has won the
Faculty Doubles
Championship 2024

### CRASH COURSE PROGRAM

### Report

The Department of Mathematics organized the first-ever Crash Course Program at Forman Christian College. It was an intensive academic initiative to assist students who were struggling with the subject matter and needed additional support.

By offering focused revision sessions and targeted instruction, the program aimed to improve overall BISE results and equip students with the necessary skills and knowledge to excel in their exams.

### Impact of Crash Course

The positive impact of the Crash Course Program on student performance and overall BISE results is expected to be significant, reflecting the commitment of the Mathematics Department to fostering academic excellence and nurturing the intellectual growth of its students.

By providing targeted support and employing a dedicated team of instructors, the program effectively addressed the diverse needs of students, ranging from those requiring remedial assistance to those seeking academic excellence. The comprehensive nature of the program, covering a substantial portion of the course material, ensured that participants were well prepared for the upcoming BISE examinations.

### Highlights







### Resposibilities

In-charge Mr. Bilal & Dr. Rabia

Content Manager
Dr. Mohsin & Dr. Khalida

Notes & Online PDF Mr. Iqbal & Mr. Sharoon

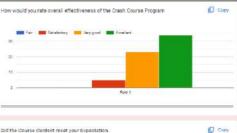
Coordination,
Planning & Updates
Ms. Sana

Course Evaluation Mr. Bilal

# 



# Effectiveness of Program







# Formanites Mathematics Society







Society vision regarding its council members is the grooming of skills, polishing of communication & social skills, boosting self-morale, preparation of practical world and importance of team work. Our aim is to introduce healthy activities for bonding of students and faculty to create a better world. We present certificates and shields to our council for their dedication and services towards society.

# Message from the Advisor

As an Advisor of the Formanite Mathematics Society, I want to express my gratitude to our team, who demonstrates a strong dedication to uplifting our FMS society through a wonderful combination of creativity and management skills. During the 2023-24, the FMS team organized various events. Additionally the FMS team actively participated in Science Fair (Sci-Novation 2.0) at FC College. The chief guests and visitors greatly admired the models crafted by the FMS. The Motto of FMS, "Empowering Minds, Inspiring Excellence, Together We Count," encapsulates our mission and values.

# Council FMS 2023-24

Advisor
Dr. Rabia
President
Zamil
Vice-President
Taha
Secretary
Arbab
Media Manager
Fakhar
Photographer
Abdullah
Logistics
M. Hamza

### SOCIETY EVENTS & CELEBRATIONS

### Welcome to 1st Year Students





### <u>TEACHERS</u> DAY

It is observed on 5th October every year. It is also known as International Teachers' Day.





### Board Preparation Task



Participation of FMS in Sci-Novation 2.0



Student of Dr. Rabia <u>&</u> Mr. Bilal



Teacher's Award
& High Grades
Celebration



Dr. Rabia Naz got the
Appreciation Certificate for
her services as Advisor



Mr. Bilal got the
Appreciation Certificate
for his services as
Convenor of Protocol
Committee



### **ALUMNI CORNER**

### Tanveer Shoukat

A Proud Alumnus (2017-2019)



I am now serving as a Lieutenant at the Pakistan-Afghanistan border in KPK. I am deeply grateful for the profound impact FCC has had on my life. The nurturing academic environment, dedicated faculty and diverse student body provided me with an education that extend far beyond textbooks. I carry forward the lessons learned and the spirit of FCC in my daily life and service to the nation with immense pride and gratitude.

## Nouman Aqil A Proud Alumnus (2017-2019)



My time at FC College was filled with everlasting memories that I still cherish, and lessons that still pave my future path. The Teachers at FC College were mentors than just teachers and the encouraging learning environment gave me the confidence to where I am today. I secured admission in NUST with high merit, and I am currently working as a Mechanical Engineer at Engro Fertilizers, one of the most complex and technically challenging plants in Pakistan.

# STUDENTS WITH DISTINCTIONS

### Muhammad Yahya

2nd Position in Pre-Engineering



My learning experience in a mathematics class was engaging and challenging. I have attended lectures and participated in discussions to understand complex mathematical concepts. I found myself fascinated by the beauty and logic of mathematics taught by the teacher. Mathematics will assist my future endeavors in numerous ways like Problem-solving skills. Critical thinking, Logical reasoning and Computational skills.

### Muhammad Bin Rafaqat

3rd Position in Pre-Engineering & Topped Ecat 2024



In mathematics class, the teacher explains something in a way that you finally "get it." You try using this new knowledge to solve practice problems, and you answer them all correctly! You feel proud and happy.

Mathematics is a foundational field that underpins many areas of study and future careers. It equipped me with critical thinking, problem-solving, and analytical abilities. These are valuable assets that will benefit me in various endeavors.

### PROFESSIONAL DEVELOPMENT

# Department's Mission, Goals and Strategic Planning



Presented By Ms. Sana Bhatti

### Mathpix Reveal



Presented by Dr. Khalida Faisal

# Best Practices In Classroom for Good BISE Result



Presented by Mr. Bilal Ahmed

Building a
Collaborative
Learning Culture



Presented by Mr. Iqbal and Mr. Sharoon

How to Hook Students & Make Learning a Fun



Presented by Dr. Mohsin Raza

How to Improve BISE Results



Presented by Dr. Rabia
Naz

### PROFESSIONAL DEVELOPMENT /ACHIEVEMENTS

Mathematics Department has organized a Workshop on "Building Professional Image"



Resource Person for the session was Ms. Nabila Naphtali (Head of Social Sciences)



Dr. Rabia Naz successfully defended her PHD Thesis



#### Dr.Khalida Faisal

#### Publications:

\* Soliton solutions of optical pulse envelope  $E(Z,\tau)$ with v-time derivative, Optical and Quantum Electronics, (2024) 56



\* Pure-cubic optical solitons to the Schrödinger equa-

tion with three forms of nonlinearities by Sardar sub-equation method, Results in Physics 48 (2023)





Renfei Luo, Khalida Faisal, Hadi Rezazadeh & Hijaz Ahmad 🗸

Contents lists available at Science lists

#### Results in Physics





Pure-cubic optical solitons to the Schrödinger equation with three forms of nonlinearities by Sardar subequation method

Khalida Faisal a, Souleymanou Abbagari a, Arash Pashrashid a, Alphonse Houwe d, Shao-Wen Yao ", Hijaz Ahmad 4



#### Dr. Rabia Naz

PHD: New Analytical Solutions of Coupled Stress Fluid with Novel Hybrid Fractional Derivatives

Analytical solutions of fractional couple stress fluid flow for an engineering problem

Article Full-text available May 2023









115 Reads - 1 Citation - 2 Recommendations

### **Editorial Team**

Chief Editor

Editor

Sana Bhatti

Bilal Ahmed

Co-Editor Dr. Khalida Faisal