IQAC recommendation

IQAC, Vivekananda College, Thakurpukur, met on 18/June/2022, to envisage, formulate and design Add-On Courses, beyond prescribed Curriculum. The IQAC has also decided to organise a program on staff training:

A. It was decided that all the departments of Humanities, Science and Commerce would design and formulate 30 hour Add-On Courses for 2022-23, Academic calendar, as per UGC guidelines.

B. It was decided that the Departments would be free to choose the Courses on the basis of their (subject) relevance, practicality and feasibility.

C. It was decided that the Departments would have a Course Coordinator, who would design the Course and Course materials, in consultation with all teachers of the Department.

D. It was decided that each Department would design their own format; and could follow a blended mode of instruction.

E. It was decided that the Departments would be encouraged to use and utilize their own resources while formulating the Add-On Courses, rather than relying on Outsourcing.

F. IQAC would send its recommendations to the Principal/TIC for perusal and implementation.

G. The IQAC would also organise a Staff Training programme - 'Effective Working Style 'Conducted by IPE Of Professional Excellence On 25th June 2022 .

18/06/22

Co-ordinator
I Q A C
Vivekananda College
Kolkata-700 063

Ref. No............................

Date............................

Notice

It is hereby notified that Vivekananda College, Thakurpukur, will offer Add-On Courses to All Honours students for the Academic year 2022-23.

Each Department will offer an Add-On Course as per UGC guidelines. Each Course will be structured & overseen by a Course Coordinator, selected from the respective Department. Departmental Heads are requested to take up the matter on an urgent basis.

24/6/22

Principal

Principal
Vivekananda College
Thakurpukur, Kol-63

VIVEKANANDA COLLEGE, THAKURPUKUR
NOTICE
Department of Physics

A departmental meeting will be held on 11.07.2022 at 1:00 p.m. to discuss on the topics mentioned below. All teachers are requested to kindly attend the meeting.

Agenda of the meeting:

i) Introduction of Add-on course on "Python for Data Science" for UG Sem I and II and UG Sem III and IV Honours students.

ii) Introduction of Add-on course on "Advanced learning tools for Scientific Project and Research paper writing" for UG Sem V and VI Honours students and PG Sem I and II ; Sem III and IV PG students

iii) Miscellaneous

Nirmalya Palari
5/07/22

HOD

VIVEKANANDA COLLEGE, THAKURPUKUR
DEPARTMENT OF PHYSICS

Resolution of the departmental meeting held on 11.07.2022

A) Teachers present in the meeting:

1. Dr. Nirmalya Pahari *Nirmalya Pahari*
2. Dr. Arvind Pan *[signature]*
3. Dr. Kaushik Ghosh *Kaushik Ghosh*
4. Dr. Arunava Jha *Arunava Jha*
5. Prof. Subhayan Biswas *Subhayan Biswas*
6. Prof. Somnath Paul *Somnath Paul*
7. Sri Debasish Chakraborty *Debasish Chakraborty*

B) Minutes of the meeting

A. In the Departmental meeting dated 11/07/2022 the teachers of the Department of Physics unanimously decided that the Sem I and II, Sem III and IV, Honours students would be offered a 30-hour Add-on Course on "Python for Data Science". Another 30-hour Add-on course on "Advanced learning tools for Scientific Project and Research paper writing" will be offered to UG Sem V and VI Honours students and PG Sem I and II; Sem III and IV PG students. It was also decided in the meeting that Dr. Arvind Pan and Prof. Subhayan Biswas of Department of Physics would be the Course Coordinator for the Add-On Course on "Python for Data Science" for the Academic session 2022-2023 and Dr. Kaushik Ghosh and Prof. Subhayan Biswas of Department of Physics would be the Course Coordinator for the Add-On Course on "Advanced Learning Tools for Scientific Project and Research Paper Writing" for the Academic session 2022-2023.

B. The Course structure of the course on "Python for Data Science" submitted by Dr. Pan and Prof. Biswas was accepted by all teachers of the department.

C. The Course structure of the course on "Advanced learning tools for Scientific Project and Research paper writing" submitted by Dr. Ghosh and Prof. Biswas was accepted by all teachers of the department.

D. Certificates would be given to each student at the successful completion of the Course.

To
The Principal
Vivekananda College,
Thakurpukur, Kolkata 700063

Dear Sir,

This is to inform you that from this academic year, we are introducing two Add-on courses for our Honours and postgraduate students of our department.

Approximately sixty students from 1st Year (Sem I and II) and 2nd Year (Sem III and IV) will be participating in the "Python for Data Science" Add-on course. Additionally, around thirty students from 3rd Year (Sem V and VI) Honours, PG 1st Year (Sem I and II), and PG 2nd Year (Sem III and IV) will be enrolled in the "Advanced Learning Tools for Scientific Project and Research Paper Writing" Add-on course. These courses are scheduled to take place on Saturdays, utilizing the central computer facilities from 12:45 p.m. to 2:45 p.m. and 3:00 p.m. to 5:00 p.m. Your cooperation is highly appreciated.
Thanking you,

Sincerely,

Nirmalya Pahari
14/07/22

Nirmalya Pahari
Head of Department
Department of Physics

Enclosure:

1. Resolution of the departmental meeting held on 11.07.2022
2. Proposal and Course structure for Introducing two Add-on Program

Proposal and Course structure for Introducing Add-on Program on
"Advanced learning tools for Scientific Project and Research paper writing"

Scientific projects and research paper writing stand as the bedrock of advancements in knowledge, innovation, and societal progress. In the dynamic landscape of academia and scientific inquiry, these endeavors play a pivotal role in shaping our understanding of the world around us. The importance of engaging in scientific projects and crafting research papers cannot be overstated, as they serve as the linchpin for intellectual growth, the evolution of technologies, and the development of solutions to pressing global challenges.

Scientific projects and research paper writing also contribute to the education and development of future scientists, engineers, and scholars. Engaging in such endeavors cultivates essential skills such as problem-solving, data analysis, and effective communication. Moreover, it instills a sense of intellectual rigor and perseverance, essential qualities for navigating the complexities of a rapidly advancing world.

The primary objective of introducing this Advanced learning tools for Scientific Project and Research paper writing Add-on Program is to up skill our Students in the field of research will able to share their insights, methodologies, and results with the global scientific community. They have some basic ideas of Latex from their course. In this Add-on program students will gain proficiency in Mathematica and Origin along with Latex (such as Data and graph visualization, theoretical representation of some experimental results etc.), which will be better equipped to handle equations, graphs and data.

The course curriculum of the program is given below.

Advanced learning tools for Scientific Project and Research paper writing

Introduction to Mathematica for problem solving, Origin for advance graph plots and advance document planning by Latex with software's needed for Hands on and their Installation.

SL No	Content	Training in hrs (30 hr)
	Scientific writing with Latex	10
1	1.1 Document Structure and Page Layout	1
	1.2 Paragraph Formatting	1
	1.3 Errors and Warnings and user packages	1
	1.4 Bibliography Management	1
	1.5 Tables	1
	1.6 Importing Graphics	1
	1.7 Floats, Figures and Captions	1
	1.8 Mathematics	1
	1.9 Advanced Mathematics	1
	1.10 Writing your document	1
2	**Plotting by Origin**	05
	2.1 Introduction to Graphing	1
	2.2 Data Exploration and Exploratory Analysis	1
	2.3 Curve and Surface Fitting	1
	2.4 Mathematics	1
	2.5 Programming and Connectivity	1
3	Mathematica (Science is tough, though calculations are easy)	15
	Basics	
	3.1 Structure of Mathematica.	1
	3.2 Interactive Use of Mathematica.	1
	3.3 Symbolic Calculations.	1
	3.4 Numerical Calculations.	1
	3.5 Graphics.	1
	3.6 Functional Programming.	2
	3.7 String and Text Processing.	2
	3.8 Two-Dimensional Graphics and Plots.	2
	3.9 Three-Dimensional Plots and Graphics.	2
	3.10 Science and Engineering.	2

Advanced learning tools for Scientific Project

and Research paper writing

(Add-on course class Routine)

SL No	Content	Training in hrs (30 hrs)	Date and time(3 pm to 4/5pm)	Teacher
1	**Scientific writing with Latex**	10		
	1.1 Document Structure and Page Layout	1	5/11/22	KG
	1.2 Paragraph Formatting	1	5/11/22	KG
	1.3 Errors and Warnings and user packages	1	12/11/22	KG
	1.4 Bibliography Management	1	12/11/22	KG
	1.5 Tables	1	19/11/22	KG
	1.6 Importing Graphics	1	19/11/22	KG
	1.7 Floats, Figures and Captions	1	26/11/22	KG
	1.8 Mathematics	1	26/11/22	KG
	1.9 Advanced Mathematics	1	03/12/22	KG
	1.10 Writing your document	1	03/12/22	KG
2	**Plotting by Origin**	5		
	2.1 Introduction to Graphing	1	10/12/22	AJ
	2.2 Data Exploration and Exploratory Analysis	1	10/12/22	AJ
	2.3 Curve and Surface Fitting	1	17/12/23	AJ
	2.4 Mathematics	1	17/12/23	AJ
	2.5 Programming and Connectivity	1	07/01/23	AJ
3	**Mathematica**	15		
	Basics			
	1.1 Structure of Mathematica.	1	14/01/23	SB
	1.2 Interactive Use of Mathematica.	1	14/01/23	SB
	1.3 Symbolic Calculations.	1	01/04/23	SB
	1.4 Numerical Calculations.	1	01/04/23	SB
	1.5 Graphics.	1	08/04/23	SB
	1.6 Functional Programming.	2	22/04/23	SB
	1.7 String and Text Processing.	2	29/04/23	SB
	1.8 Two-Dimensional Graphics and Plots.	2	06/05/23	SB
	1.9 Three-Dimensional Plots and Graphics.	2	13/05/23	SB
	1.10 Science and Engineering.	2	20/05/23	SB

SB => Subhayan Biswas, AJ => Arunava Jha, KG => Kaushik Ghosh

Date of Examination 27/05/23 (12:45 pm to 2:45 pm -MCQ mode)