

ONLINE ADD-ON COURSES

SESSION 2020-21



KANDI RAJ COLLEGE

KANDI, MURSHIDABAD, 742137

From the desk of the TIC

Based on the recommendations of the Internal Quality Assurance Cell of our college, we had introduced several Value-added (Add-on) courses in our college (conducted in online mode) last year. Boasted by the success of those courses, this year, we are again introducing a host of new courses across different disciplines.

Last year, at the initial stage, only seven courses were introduced. This time around we have expanded our range, offering a total of eleven value-added courses for our students.

Hopefully, this time also, the students will embrace these new courses and in turn will add new skills to their existing skill-sets.



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Add-on Course on:

বাংলা লোকসঙ্গীত – জেলা মুর্শিদাবাদ

Course coordinator:

অধ্যাপক মকর মুর্মু / ফোন নম্বর – ৯৭৩৪০২১৭০৫

Introduction
To The
Course:

মুর্শিদাবাদ জেলার কান্দি মহকুমা এলাকায় প্রচলিত বিভিন্ন লোক গীতি সম্বন্ধে ছাত্রছাত্রীদের অবহিত করা। এই লোক গান গুলির ধারাবাহিকতা রক্ষা এবং লুপ্তির হাত থেকে বাঁচানো।

Outcome:

এই সম্বন্ধে ছাত্র ছাত্রীরা অবহিত হয়ে তারা নিজেরাও এর ঐতিহ্য, ইতিহাস সম্পর্কে জানবে। এই গান গুলির সঙ্গে পরিচিত হয়ে, নিজেরাও আধুনিক গানের সঙ্গে সামঞ্জস্য বিধান করে শিখে নিতে পারবে।

Date & Mode:

২২/০৭/২০২০ – ০৯/০৮/২০২০ / অন লাইন

Course fee:

nil

How to apply:

contact course coordinator

Who can apply:

Student of 4th Sem

Syllabus:

লোকসঙ্গীতের সংজ্ঞা, ইতিহাস, ঐতিহ্য, শ্রেণীবিভাগ, কান্দি এলাকার লোক সঙ্গীত, সমাজ ও সাংস্কৃতিক সম্পর্ক, প্রভাব .

Serial no	Unit/Module	No. of lecture	Resource person
1	1	15	S.T/ T.B/ M.M
2	1	15	S.T./ T.B./ M.M

Study materials & References:

১। **বাঙলা লোকসঙ্গীত** – অমল পাল, দুলাল চৌধুরী (সম্পাদিত), পাঁচালি প্রকাশন, কলকাতা।

২। **বঙ্গীয় লোক-সঙ্গীত রত্নাকর** – শ্রী আশুতোষ ভট্টাচার্য, পশ্চিমবঙ্গ লোক সংস্কৃতি গবেষণা পরিষদ। কলকাতা।

৩। **উত্তর রাঢ়ের লোকসঙ্গীত** – দিলীপ মুখোপাধ্যায়, কল্যাণী প্রকাশন, কলকাতা।

Add-on Course on:

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Course coordinator:

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Introduction
To The
Course:

Computational Chemistry: A short Introduction and Application

Dr. Rangana Sinha, Assistant Professor and Head,
Department of Chemistry, Kandi Raj College

email: ranganasinha69@gmail.com, Contact number: 9477144694

In this course, basic concepts of programming in **FORTTRAN** have been introduced at first. Then two computational methods have been introduced using well known software packages like **AutoDock** and **Gaussian** for structural studies of molecules.

Module 1 deals with **FORTTRAN** which was originally developed by a team at IBM in 1957 for scientific calculations. Later developments made it into a high-level programming language. It is a good language for beginners as it is easy to learn and widely available. Module 1 starts with organization and architecture to a computer followed by number systems and introduction to programming in **FORTTRAN**. Different units of Module 1 discussed about programming of Arrays, derived type structures, handling characters, sub-programs and functions, how to program loops, decisions, writing and compiling complete programs and how to understand and fix the errors. This module includes coding exercises and theoretical explanations as well as practical examples to teach the students **FORTTRAN** in a practical manner.

In module 2, AutoDock software is introduced for molecular docking in order to design drugs. Pharmaceuticals may develop impurities at various stages of their development which makes the pharmaceutical products risky to be administered. Thus they must be identified and quantitated. Analytical instrumentation and methods play an

essential role for assessing the quality of drug in the process of drug development. Compared with traditional experimental high-throughput screening (HTS), Virtual Screening is a more direct and rational drug discovery approach and has the advantage of low cost and effective screening. Virtual Screening can be classified into ligand-based and structure-based methods. Molecular docking in that cases play important role for the discovery/designing to new drug molecules. The molecular docking approach can be used to model the interaction between a small molecule and a protein at the atomic level, which allow us to characterize the behaviour of small molecules in the binding site of target proteins or DNA as well as to elucidate fundamental biochemical processes.

Module 3 introduces **Gaussian** software for optimization of structures of organic molecules for studying **Dye sensitized solar cell (DSSC)**. DSSC are one of the most promising types of solar cells with excellent efficiency without any significant adverse effect on the environment. Still now the photo-conversion efficiencies of DSSCs are much lower than the theoretical threshold. There is a huge scope of research and innovation in this field. Generally practical synthesis and experimentation with DSSCs are time consuming tedious jobs with large amounts of expenditures. Theoretical/computational study can provide an alternative path with more or less accurate outcomes. Software like Gaussian is well known to researchers for quite a long time for their application in research which is introduced in this module.

Outcome:

The three primary activities in theoretical and computational chemistry are development of new theory, implementation of methods as reliable software, and application of such methods to a host of challenges in chemistry, biology and biochemistry. **Learning FORTRAN programming** is particularly useful for scientists and engineers as there are inbuilt functions for handling mathematical constructs. There are libraries of numerical algorithms available that shortcut the coding. In spite of being the oldest one, FORTRAN is still a dominant language for the large-scale simulation of physical systems, i.e. for things like the astrophysical modelling of stars and galaxies, hydrodynamics codes, large scale molecular dynamics, electronic structure calculation codes, large scale climate models, etc. and there are many quantum chemistry *software packages written in Fortran* for performing precise *electronic structure* where the precision of calculations can be selected/modified by the user according to the need of the calculation. With this course, students will become perfectly familiar with the FORTRAN interface and workspace to configure and prepare all aspects of the coding. They will be able to apply everything learned in advanced applications such as Numerical Methods and will be able to understand and/or modify some open source software packages written in FORTRAN.

With preceding modules, students will be familiar with **Drug design and discovery** process which mainly focuses on new compounds and technologies in all aspects of human therapeutics as well as to improve the global management health care policy and regulatory issues. Focused on small molecules, specific areas of interest include screening technologies, target and lead identification and validation, laboratory automation, high throughput screening, assay development and validation, high content analysis, data mining, biomarkers discovery, ADME, BioMEMS, microfluidics, sample management,

biobanking, cell-based assay, 3D cell culture, phenotypic screening. The insights and advances from the combined use of chemical and biological research results in development of new drugs.

Learning Gaussian and its application to Dye Sensitized Solar Cells (DSSCs) is beneficial in number of ways as nowadays, major concerns focus on replacing renewable energy instead of petroleum fuels due to its expected depletion. A dye-sensitized solar cell (DSSC) is one of the alternative energies besides wave energy, biofuel, geothermal power, winds, tidal energy, and Hydrogen gas. In particular, with a basic knowledge of DSSCs & Gaussian software packages, optimization of structures of organic molecules, determination of spectroscopic properties, calculation of lifetime of short-lived species etc. can be easily done with the help of a moderate PC to modify DSSCs which are already been reported or design a new one. That in turn enables students to carry out small experiments on their own. This knowledge can further be applied to other fields of theoretical studies.

We hope, as an outcome of this course, undergraduate students will gain knowledge and experience in computational chemistry for their future research purpose.

Date & Mode:

05/07/20-23/08/20 online mode

Course fee:

nil

How to apply

contact course coordinator

Who can apply:

Student of 4th Sem

Syllabus:

MODULE 1

UNIT 1: Basic concepts of computers, number system and programming in Fortran

UNIT 2: Basic Fortran commands, data types, variables, constants, operators and decisions

UNIT 3: Control statements and Loops

UNIT 4: Arrays, Subroutines and functions

UNIT 5: Algorithm and Flowcharts, real program writing and compilation

MODULE 2

UNIT 1: Introduction to drug design and discovery

UNIT 2: Structure and properties of the targeted molecule.

UNIT 3: ADME-rule, Auto Dock software

UNIT 4: Enzymes/DNA/proteins structures/ Molecular docking

UNIT 5: Interaction with students about course

MODULE 3

UNIT 1: An introduction to Dye Sensitized Solar Cells (DSSCs).

UNIT 2: Characteristics of Organic Dye.

UNIT 3: Application of computational chemistry for optimization of structure of organic dye using Gaussian

UNIT 4: Calculation of various properties of DSSCs.

UNIT 5: Hands on application.

Serial	Module	No. of lecture	Resource person
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no		(2 hrs per lecture)	
1	1	5	Dr Anindita Shit
2	2	5	Dr Pradip Bera
3	3	5	Mr. Sourav Majumder

Study materials & References:

Will be provided during course

Add-on

Course on:

Creative Writing

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Course coordinator:

Mrs. Mousumi Das, Assistant Professor and Head, Department of English, Kandi Raj College, mob: 9474660575

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Introduction

To The
Course:

. This is a practical course designed to get the students interested about creating their own works of Story-telling, Fiction, Poetry, Drama and also Creative Non-Writing techniques, literary devices and specialised skills will be covered to help them discover, perfect and share their own writer's voice

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Outcome:

i) Creative Writing boosts the students' imagination enabling them to create new worlds, situations and characters in their work.

ii) The students will be aware of the literary, cultural and historical contexts within which they write, including the influence of past and present literary forms, structures, styles, and traditions on their artistic choices.

iii) The creative writer will be able to captivate an audience by creating an emotional or thoughtful appeal, although the type of writing will determine how it will do so

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Date & Mode:

02/07/20- 27/08/20 (Online mode)

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Course fee:

: **nil**

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How to apply:

contact course coordinator

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Student of 4th Sem

Who can apply:

Syllabus:

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- i) Fundamentals of Writing (Introduction, Lucidity and Credibility, Authenticity and Credibility , Authorial Voice)
 - ii) Ideas and Their Dramatization (Situations and Construction of the Narrative, Imagery and Symbolism, Readability)
 - iii) Structuring the Material (The Creative Impulse: Origin, Opening, Building a Climax, Appropriate Ending)
 - iv) A Press Copy Preparation (Revising the draft and proof Reading, Indexing, Editing, Acknowledging the Sources)

Serial no	Unit/Module	No. of lecture	Resource person
1.	Fundamentals of Writing	03	Mousumi Das
2.	Ideas and Their Dramatization	02	Mousumi Das
3.	Structuring the Material	03	Piyali Sarkar
4.	A Press Copy Preparation	02	Piyali Sarkar

Study materials & References:

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- 7. **Dev. Creative Writing- New Delhi: Pearson**
 - 8. **BELL, Julia. The Creative Writing Course Book Pan Mac**
 - 9. **Harper, Greame. Teaching Creative Writings.**
-

Add-on Course on:

Aspects of Ancient Indian Art and Architecture

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Course coordinator:

Mr. Pankaj kr. Das, Assistant Professor and Head, Department of History, Kandi Raj College, Mob: 9434813790

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Introduction
To The
Course:

The culture and History of India's dynamic, unique and intriguing. It is amongst the first civilizations to have come into existence. Historical records trace the beginning of this great nation to the Indus valley civilisation, which was one of the oldest known civilisations in the world. It will also help the students to establish a link between culture and heritage

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Outcome:

The participants will be able to learn: 1. To teach the learners to pay honour to great Indian culture and implement value sense in livelihood. 2. To acquaint the learners with the great contributors of our ancestors in the areas of Philosophy, Science, Art, Music, Architecture etc. 3. To establish a link between culture and heritage

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Date & Mode:

20th July – 20th August, 2020 (Online Mode)

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Course fee:

Nil

How to apply:

contact course coordinator

Who can apply:

Student of 4th Sem

Syllabus:

Serial no	Unit/Module	No. of lecture	Resource person
1	What is Art and Architecture?	one	Pankaj kr. Das
2	Sculptures of the Indus valley civilization	one	Sumit Chowdhury
3	<i>Mouryan</i> Art and Modern Painting	one	Pankaj kr. Das
4	Early <i>Buddhist</i> Sculptures	one	Amrita Biswas
5	Emergence of regional Art and Architecture	one	Amrita Biswas
6	<i>Gandhara</i> Art Technology	one	Amrita Biswas
7	<i>Mathura</i> Art Technology	one	Sumit Chowdhury
8	<i>Saranath</i> School of Art	One	Pankaj kr. Das
9	Impact of <i>Pala</i> and <i>Sena</i> Art	one	Sumit Chowdhury
10	Hindu Temple Architecture and modern Science	one	Pankaj kr. Das

Study materials & References:

Will be provided during course.

Add-on Course on:

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Course coordinator:

A Foundation Course on Programming in “C”

Mr. Jayanta Basu, Assistant Professor and Head, Department of Mathematics, Kandi Raj College 9433424776;
basujayanta0@gmail.com

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Introduction
To The
Course:

C is a rich and popular programming language which is commonly used by scientists and engineers to write programs for any specific application. It is also a widely accepted programming language in the software industries. C Programming is one of the essential and powerful language to learn the fundamentals of programming.

This beginner's level course is for student programmers to effectively write programs for solving numerical problems. All that is required of a beginner programmer is not experience in computing but interest in computing. The programmes studied in this short course have been accumulated and adapted from different university question papers. Entire course is supplemented with hands-on training on each and every topic in C.

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Outcome:

The course aims to enable young minds with a strong foundation in problem solving using C programmes. At the end of this course a student will hopefully be able to develop simple programmes to solve different numerical and other problems

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Date & Mode:

6th July, 2020 to 6th August, 2020 (online)

nil

Course fee:

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How to apply:

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Who can apply:

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Syllabus:

contact course coordinator

Student of 4th Sem

Serial no	Unit/Module	Content	No. of lectures	Resource person
1	Module 01	What is "C": History of "C"; purpose of "C"; Basic features of "C"; Layout; Declarations; Body; Further Examples	02 [T] + 01[P]	Jayanta Basu
2	Module 02	Variables & data types: Characters, Integers and Floating Point Numbers; Naming Variables; Constants; Examples	02 [T] + 01[P]	Jayanta Basu
3	Module 03	Arithmetic Operators: Addition, Subtraction, Multiplication, Division & Modulus; Integers vs Floating Point Arithmetic; Precedence; Assignment Operators; Increment/Decrement Operators; Workshop1: Problems & Solutions	02 [T] + 01[P]	Jayanta Basu
4	Module 04	Control Statements-Part1: If & If-else; Relational, Logical and Equality Operators; The "!" Operator; Value of an Expression Workshop2: Problems & Solutions	02 [T] + 01[P]	Dr. Bandhu Prasad
5	Module 05	Control Statements-Part2: Condition Expressions; Switch Statement; Workshop3: Problems & Solutions	02 [T] + 01[P]	Dr. Bandhu Prasad
6	Module 06	Loops: For, While & Do-while loops; Workshop4: Problems & Solutions	02 [T] + 01[P]	Dr. Bandhu Prasad
7	Module 07	Functions: Declaring Functions; Returning Values; Variables & Scope Workshop5: Problems & Solutions	02 [T] + 01[P]	Dr. Bandhu Prasad

8	Module 08	Array: One-dimensional and Two-dimensional Array; Sorting; Workshop6: Problems & Solutions	02 [T] + 01[P]	Jayanta Basu
9	Module 09	Application in Numerical Analysis: Problems & Solutions	03[P]	Dr. Bandhu Prasad
10	Module 10	Course Summary: Assignments	01[T] + 02[P]	Jayanta Basu

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Study materials & References:

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Will be provided during course

Add-on Course on:

Black holes Fundamentals

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Course coordinator:

Dr. Atanu Kumar Das and Mr. Abhijit Dutta, Assistant Professor, Department of Physics, Kandi Raj College

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Introduction

To The
Course:

In this course the syllabus will cover a brief concept of black holes and its existence. This course also includes the life and death of star. This course is intended to introduce students to the predicted properties of black holes and the astronomical evidence for their existence. Along the way we will study modern ideas about the nature of space, time, and gravity.

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Outcome:

After completing this course, a student will be able to:

- understand the essential characteristics of black holes i.e. it's birth, nature, fate etc.
- understand how recent research is going on black hole properties and its connection with Thermodynamics.
- Compare different types of black holes in scientific approach to distinguish them from science fiction.
- Describe the connection of basic concepts of physics i.e. gravity, special and general relativity, and quantum mechanics with black hole properties.
- Recognize different types of stars and distinguish which stars can potentially approaches black holes.
- Characterize the formation of theories associated with each type of black holes.
- Identify different ways of detecting black holes with appropriate technologies.

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Date & Mode:

: 7th July to 31st Aug 2020 Mode(Online Mode)

Course fee: **nil**

How to apply:

contact course coordinator

Who can apply:

Student of 4th Sem

Syllabus:

Serial no	Unit/Module	No. of lecture	Resource person
1	Introduction to Black Holes	(1L)	Dr. Atanu Kumar Das
2	Life and Death of a Star	(1L)	Dr. Atanu Kumar Das
3	The Structure of Space-time	(1L)	Dr. Atanu Kumar Das
4	Approaching a Black Hole	(1L)	Dr. Atanu Kumar Das
5	Crossing of Event Horizon	(1L)	Dr. Atanu Kumar Das
6	Inside a Black Hole	(1L)	Dr. Atanu Kumar Das
7	Detection of Black Holes	(1L)	Dr. Atanu Kumar Das
8	Characteristics of Black Hole	(1L)	Mr. Abhijit Dutta
9	Background Physics on evolution of a Black Hole	(1L)	Mr. Abhijit Dutta
10.	Dependency on Relativity, Gravity	(1L)	Mr. Abhijit Dutta
11.	Connections with Quantum Physics and Thermodynamics	(2L)	Mr. Abhijit Dutta
12.	Thermal Properties of a	(2L)	Mr. Abhijit

Study materials & References:

	Black Hole		Dutta
13.	Radiation and its fate	(1L)	Mr. Abhijit Dutta

1.

https://en.wikipedia.org/wiki/Black_hole#:~:text=A%20black%20hole%20is%20a,to%20form%20a%20black%20hole.

2. T. P. Sotiriou, *Class. Quantum Grav.* **32**, 214002, 2015.

3. C. DE MARIA, H. Maceti, I. J, Lautenschleguer **4** 505 2015.

Add-on
Course on:

Grammar and composition

Course coordinator:

Mr. SUPRIYA ROY Assistant Professor and Head, Department of Sanskrit, Kandi Raj College, Mob: 9093765087

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Introduction
To The
Course:

Grammar of the Sanskrit language has a complex verbal system, rich nominal declension, and extensive use of compound nouns. It was studied and codified by Sanskrit grammarians from the later Vedic period (roughly 8th century BCE), culminating in the Pāṇinian grammar of the 4th century BCE.

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Outcome:

This course aims to get students acquainted with classical Sanskrit literature poetry. It intends to give an understanding of Literature, through which students will be able to appreciate the development of Sanskrit literature. The course also aims to help students to negotiate texts independently.

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Date & Mode:

: 10th July to 13th Aug 2020 Mode(Online Mode)

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Course fee:

nil

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How to apply:

contact course coordinator

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Who can apply:

Student of 4th Sem

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Syllabus:

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1. Nominative forms of pronouns- *asmad, yuṣmad, etat* and *tat* in masculine, feminine and neuter.
 2. Nominative forms of 'a' ending masculine and neuter gender nouns with *paṭh, khād, likh* and similar simple verbs in present, past and future.
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3. **Objective forms of the above nouns and pronouns in singular with more simple verbs.**
4. **Instrumental, dative, ablative forms of the above nouns and pronouns in singular, dual and plural instrumental, dative, ablative forms of all the words in this syllabus.**
5. **Special Verb forms – in parasmaipada –past,**
6. **Special Verb forms – in parasmaipada – present**
7. **Special Verb forms – in parasmaipada – future**
8. **Special Verb forms – in parasmaipada –imperative**
9. **Special Verb forms – in parasmaipada – kr**
10. **Special Verb forms – in parasmaipada – śrū**

Serial no	Unit/Module	No. of lecture	Resource person
1	Nominative forms of pronouns- asmad, yuṣmad, etat and tat in masculine, feminine and neuter.	One	Supriya Roy
2	Nominative forms of ‘a’ ending masculine and neuter gender nouns with paṭh, khād, likh and similar simple verbs in present, past and future.	One	Sukanya Sarkar
3	Objective forms of the above nouns and pronouns in singular with more simple verbs.	One	Goutam Chatterjee
4	Instrumental, dative, ablative forms of the above nouns and pronouns in singular, dual and plural instrumental, dative, ablative forms of all the words in this syllabus.	One	Chumki Pal
5	Special Verb forms – in parasmaipada –past	One	Supriya Roy
6	Special Verb forms – in parasmaipada – present	One	Sukanya Sarkar
7	Special Verb forms – in	One	Goutam

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Study materials & References:
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	parasmaipada – future		Chatterjee
8	Special Verb forms – in parasmaipada – imperative	One	Chumki Pal
9	Special Verb forms – in parasmaipada – kr	One	Supriya Roy
10	Special Verb forms – in parasmaipada – śrū	One	Sukanya Sarkar

Will be provided during course

Add-on
Course on:

Personality Development

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Course coordinator:

Mr. Srimonta Mondal, Assistant Professor and Head,
Department of Philosophy, Kandi Raj College, Mob: 8617434002

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Introduction
To The
Course:

This course helps students to improve and learn to understand personality traits and Positive attitude. It improves soft skills like Personality development, Communication Skill, Develop workplace etiquette. Self-confidence & Body language

Outcome:

The Personality Development Course polish & improves students' presentation and communication skills. The course will help them to groom their personality and deal with people effectively. During the course students also receive focused guidance on persona management, grooming, health and soft skills.

Date & Mode:

05/07/20-23/08/20 online mode

Course fee:

nil

How to apply

contact course coordinator

Who can apply:

Student of 4th Sem

Syllabus:

MODULE 1

UNIT 1: Basic concepts of computers, number system and programming in Fortran

UNIT 2: Basic Fortran commands, data types, variables, constants, operators and decisions

UNIT 3: Control statements and Loops

UNIT 4: Arrays, Subroutines and functions

UNIT 5: Algorithm and Flowcharts, real program writing and compilation

MODULE 2

UNIT 1: Introduction to drug design and discovery

UNIT 2: Structure and properties of the targeted molecule.

UNIT 3: ADME-rule, Auto Dock software

UNIT 4: Enzymes/DNA/proteins structures/ Molecular docking

UNIT 5: Interaction with students about course

MODULE 3

UNIT 1: An introduction to Dye Sensitized Solar Cells (DSSCs).

UNIT 2: Characteristics of Organic Dye.

UNIT 3: Application of computational chemistry for optimization of structure of organic dye using Gaussian

UNIT 4: Calculation of various properties of DSSCs.

UNIT 5: Hands on application.

Serial no	Module	No. of lecture (2 hrs per lecture)	Resource person
1	1	5	Dr Anindita Shit
2	2	5	Dr Pradip Bera
3	3	5	Mr. Sourav Majumder

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Study materials & References:
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Will be provided during course

Add-on Course on:

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Course coordinator:

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Introduction
To The
Course:

Geotectonics and Geomorphology

Sarbananda Mondal; 9932225382

For instance, understanding issues of deforestation, soil properties, and seasonal precipitation can better assess frequencies of flooding events and their potential danger. The discipline which analyses the history and nature of the earth's surface, deals with the landforms produced by erosion, weathering, deposition, transport and tectonic processes. Tectonic activity also plays an essential role in maintaining the long-term stability of Earth's thermostat. Consider the case of carbon dioxide. A planet

with too much carbon dioxide could end up like Venus, a planetary blast furnace.

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Outcome:

The study of landforms, their processes, form and sediments at the surface of the Earth is known as Geomorphology. It is important as it provides a landscape platform to develop practices to understand how the natural world looks.

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Date & Mode:

: 05/07/20-23/08/20 (Online Mode)

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Course fee:

nil

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How to apply:

contact course coordinator

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Who can apply:

Student of 4th Sem

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Syllabus:

Serial no	Unit/Module	No. of lecture	Resource person
1	Earth's tectonic & Structural Evolution	One	Sarbananda Mondal
2	Structural Evolution special reference Geological Time Scale	One	Shakya Sinha

3	Earth's interior with special reference to Seismology	One	Madhuparna Sarkar
4	Isostasy Model of Airy & Pratt	One	Saheli Banu
5	Plate Tectonic Theory	One	Sarbananda Mondal
6	Continental Drift Theory	One	Shakya Sinha
7	Degradational Process : weathering Mass wasting and resultant Landforms	One	Madhuparna Sarkar
8	Landform on Folded and Faulted structure	One	Saheli Banu
9	Cycle of Erosion : Davis, Penck, King and Hack	One	Sarbananda Mondal
10	Evolution of landforms : River, Karst, Aeloin, Glacial	One	Shakya Sinha

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Study materials &
References:
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Will be provided during course
