



JHARGRAM RAJ COLLEGE

(Government of West Bengal)



affiliated to Vidyasagar University

A DBT Star College

Jhargram College Road, Jhargram, West Bengal 721507

Ph: +91 3221 255022, 258700 (Fax)

Email: jhargramrajcollege@gmail.com / droyzoology@gmail.com /
principal@jrc.ac.in

Website: <https://jrc.ac.in>

**NAAC SSR CYCLE II
CRITERIA 1**

ACADEMIC FLEXIBILITY 1.2

NUMBER OF CERTIFICATE/VALUE ADDED COURSES OFFERED AND ONLINE COURSES OF MOOCS, SWAYAM, NPTEL ETC. WHERE THE STUDENTS OF THE INSTITUTION HAVE ENROLLED AND SUCCESSFULLY COMPLETED DURING THE LAST FIVE YEARS 1.2.1

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NOTICE

Jhargram Raj College

O/C No. 67/1

Date: 01/07/2022

All the interested faculty members/departments are hereby requested to submit the detailed curriculum of certificate/value added course which will be offered during the academic session, 2022-23 in the office of the Principal by 15/07/2022 positively.


Principal
Jhargram Raj College
Principal
Jhargram Raj College

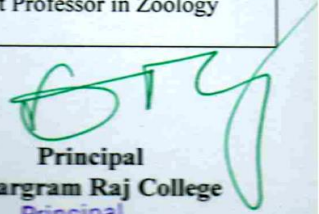
Jhargram Raj College

O/C No. 79/1

Date: 29/07/2022

This is to notify all concerned that the following certificate courses will be offered for the academic session 2022-23. All interested students are directed to contact the respective course coordinator to register themselves within 05/08/2022. Students will be selected strictly on a first come first serve basis, the maximum intake capacity is 30 in each course.

Sl. No.	Topic	Course coordinator
1	Ethnomedicinal Studies	Arabinda Samanta, Assistant Professor in Botany
2	FORTRAN: Basics and Numerical Applications	Nabakumar Bera, Assistant Professor in Chemistry
3	Social Formations and the Cultural Patterns of the Ancient World	Susen Gangopadhyay, Assistant Professor in History
4	INCOME TAX E-FILING	Satyajit Ghorai, Assistant Professor in Commerce
5	ECOLOGY AND ETHICS IN ANCIENT INDIAN PHILOSOPHY	Sujan Pramanik, Assistant Professor in Philosophy
6	Basic Python Programming and Data Manipulation	Krishnendu Sinha, Assistant Professor in Zoology


Principal
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Jhargram Raj College

O/C No. 84/1

Date: 10/08/2022

This is to notify all concerned that the following certificate courses will be commenced on and from 13/08/2022. All the course coordinators are hereby requested to conduct their respective certificate courses according to the approved course curriculum. All non-teaching staffs are also requested to make available themselves for smooth conduction of the classes.

Sl. No.	Topic	Course coordinator
1	Ethnomedicinal Studies	Arabinda Samanta, Assistant Professor in Botany
2	FORTTRAN: Basics and Numerical Applications	Nabakumar Bera, Assistant Professor in Chemistry
3	Social Formations and the Cultural Patterns of the Ancient World	Susen Gangopadhyay, Assistant Professor in History
4	INCOME TAX E-FILING	Satyajit Ghorai, Assistant Professor in Commerce
5	ECOLOGY AND ETHICS IN ANCIENT INDIAN PHILOSOPHY	Sujan Pramanik, Assistant Professor in Philosophy
6	Basic Python Programming and Data Manipulation	Krishnendu Sinha, Assistant Professor in Zoology


Principal
Jhargram Raj College
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Jhargram Raj College

Jhargram Raj College

O/C No. 1/1

Date: 02/01/2023

All concerned students are hereby directed to collect the certificate for the certificate courses which were held in July to December, 2022 from the office of the Principal, within 12/01/2023.


Principal
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Jhargram Raj College

Course Module

Course I: Ethnomedicinal Studies



Jhargram Raj College

Jhargram College Road, P.O & Dist.: Jhargram, Pin-721507.

Phone No: +91 3221 255022, 258700 (Fax), E-mail: jhargramrajcollege@gmail.com, Website: www.jrc.ac.in

Title: Certificate Course on **Ethnomedicinal Studies**

Duration: 30 hours

Strength: Maximum 35 students

Syllabus:

- **UNIT I: 4 Hours**
 1. Ethnomedicine: Brief Concept
 2. Ethnomedicine in Indian Context: Ayurveda in relation to IKS
- **UNIT II: 10 Hours**
 1. Study of some ethnomedicinal plants and their mode of application used by local communities as remedies of major diseases like Diabetes, Cough, Skin diseases, stomachache.
- **UNIT III: (Practical) 16 Hours**
 1. Visit to Ayurvedacharyya Shibkali Bhattacharya Medicinal Plant Garden of Jhargram Raj College & study local vernaculars, taxonomic details, phytochemical constituents & ethnomedicinal importance of *Asparagus racemosus*, *Aristolochia indica*, *Gymnemasylvestre* and *Piper longum*.
 2. Ethnomedicinal survey to the adopted villages: Questionnaire preparation, Conducting interviews to native peoples and traditional healers, Identification of ethnomedicinally important plants and Survey report preparation.

Faculty: Arabinda Samanta, Assistant Professor (Course Coordinator), Mrs. Daliya Mahato, SACT-II; Dr. Sudip Kumar Das, SACT-I, Department of Botany.

Centre: Jhargram Raj College, Jhargram.

Attendance: Minimum 70% attendance.

Examination: At the end of the course for those with minimum attendance.

Certificate: For all who appeared in the examination and scored minimum 40%

Course Fees: Nil

Course II: FORTRAN: Basics and Numerical Applications



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Title: Certificate Course on FORTRAN: Basics and Numerical Applications

Duration: 30 hours

Strength: Maximum 35 students

Syllabus:

Basics or FORTRAN:

- Topic 1(Basic Concepts of Computers and Number systems):2 hours
- Topic 2(Programming with FORTRAN: Some basic rules): 2 hours
- Topic 3(Some Basic Commands: READ, WRITE, PAUSE, STOP, END): 2 hours
- Topic 4(Control Statements): 2 hours
- Topic 5 (DO loops): 2 hours
- Topic 6 (ARRAYS and subscripted variables): 2 hours
- Topic 7 (Algorithm and Flow chart): 2 hours
- Topic 8 (Subprogram: Function and Subroutine): 2 hours

Numerical Applications:

- Topic 9 (Solutions of Linear Algebraic Equations): 2 hours
- Topic 10 (Interpolation and Extrapolation):2 hours
- Topic 11 (Numerical Integration):2 hours
- Topic 12 (One dimensional root finding methods):2 hours
- Topic 13 (Numerical Derivative):2 hours
- Topic 14 (Integration to Ordinary Differential Equations (ODE)):2 hours
- Topic 15 (Statistical Description of Data):2 hours

Faculty:

Dr. Nabakumar Bera, Assistant Professor, Jhargram Raj College (Course Coordinator).
Dr. Pradipta Ghosh, Assistant Professor, Jhargram Raj College.
Dr. Dilip Rout, Associate Professor, Jhargram Raj College.
Dr. Susovan Mandal, Assistant Professor, Jhargram Raj College.

Centre: Jhargram Raj College, Jhargram

Attendance: Minimum 70% attendance

Examination: At the end of the course for those with minimum attendance.

Certificate: For all who appeared in the examination and scored minimum 40%

Course III: Income Tax E-Filing

Ph.No.03221-255022/258700



GOVERNMENT OF WEST BENGAL
Office of the Principal, Jhargram Raj College
JHARGRAM:: 721507; Website: www.jrc.ac.in

Title: Certificate Course on **INCOME TAX E-FILING**

Duration: 30 hours

Strength: Maximum 35 students

Syllabus:

Unit I: Introduction

4 hours

Basic Concepts – Tax, Income Tax, Person, Assessee, Previous Year, Assessment Year, Heads of Income, Sources of Income, Computation of Taxable Income, PAN Card, Income Tax Return, Due date of Return submission

Unit II: E-filing: Theoretical Aspects

4 hours

E-filing - Concept, Types, Process, Advantages and Problems; Differences between e-filing and regular filing of income tax return

Unit III: E-filing Process (Practical)

14 hours

Income Tax Portal, Income Tax Calculator, 26 AS, AIS Report, Preparation of electronic return, Process of filing- ITR-1, ITR-2, ITR-3, ITR- 4, ITR-5, ITR-6, Payment of Advance Tax and Self-Assessment Tax, Interests, Fees, Penalties

Unit IV: TDS Return

8 hours

Concept of TDS, Rules regarding advance payment of tax, Schedule for deposit of TDS, Due date for submission of TDS Return, Forms for filing TDS return, Exemption for TDS – Form 13, 15G, 15H; Preparation of e-filing of TDS return (Practical).

Faculties:

Dr.Satyajit Ghorai, Assistant Professor (Course Coordinator);Dr. Pradip Kumar Panda, Associate Professor; Sri Brahma Chaudhuri, Assistant Professor; Dr. Alope Gupta, Assistant Professor; Dr. Surajit Biswas, Assistant Professor;Smt Priya Tamang, Assistant Professor

Centre:Department of Commerce, Jhargram Raj College, Jhargram

Attendance: Minimum 70% attendance

Examination: At the end of the course for those with minimum attendance

Certificate: For all who appeared in the examination and scored minimum 40%

Course Fees: Nil

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Course IV: Social Formation and the Cultural Patterns of the Ancient World



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Title: Certificate Course on Social Formations and the Cultural Patterns of the Ancient World

Duration: 30 hours

Strength: Maximum 35 students

Syllabus:

- **Topic 1-** Evolution of humankind; Paleolithic and Mesolithic cultures: 2 hours
- **Topic 2-** Food production: Beginnings of agriculture and animal husbandry: 2 hours
- **Topic3-** Bronze Age Civilizations, with reference to: i) Egypt (Old Kingdom); ii) Mesopotamia (up to the Akkadian Empire); iii) China (Shang); iv) Eastern Mediterranean (Minoan) economy, social stratification, state structure, religion: 12 hours
- **Topic 4-** Nomadic groups in Central and West Asia; Debate on the advent of iron and its implications: 5 hours
- **Topic 5-** Slave society in ancient Greece: Agrarian economy, urbanization, trade: 5 hours
- **Topic 6-** Polis in ancient Greece: Athens and Sparta; Greek Culture: 4 hours

Faculty:

I. Susen Gangopadhyay, Assistant Professor in History, Jhargram Raj College (Course Coordinator).

II. Oindrila Sen, Assistant Professor in History, Jhargram Raj College

III. Rajesh Kumar Pandey, Assistant Professor in History, Jhargram Raj College

Centre: Jhargram Raj College, Jhargram

Attendance: Minimum 70% attendance

Examination: At the end of the course for those with minimum attendance

Certificate: For all who appeared in the examination and scored minimum 40%

Course Fees: Nil

Course V: Ecology and Ethics in Ancient Indian Philosophy



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Title: Certificate Course on ECOLOGY AND ETHICS IN ANCIENT INDIAN PHILOSOPHY

Duration: 30 hours

Strength: Maximum 35 students

Syllabus:

- UNIT 1: 2 Hours
 1. What is ethics?
 2. What is ecology?
- UNIT 2: 8 Hours
 1. Ethics and ecology in Sruti Sastra
- UNIT 3: (10 Hours)
 1. Ethics and ecology in Purana
- UNIT 4 : (5 Hours)
 1. Ethics and ecology in Jainism
- UNIT 5 : (5 Hours)
 1. Ethics and ecology in Buddhism

Faculty: Sujan Pramanik, Assistant Professor (Course Coordinator); Smt.Sudipta Mullick, Associate Professor; Smt. Poulomi Chakraborty, Assistant Professor; Sri Utsav Roy, Assistant Professor; Smt. Satabdi Das, Assistant Professor; Smt. Jharna Mahata (SACT); Department of Philosophy

Centre: Jhargram Raj College, Jhargram

Attendance: Minimum 70% attendance

Examination: At the end of the course for those with minimum attendance

Certificate: For all who appeared in the examination and scored minimum 40%

Course Fees: Nil.

Course VI: Basic Python Programming and Data Manipulation



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Title: Certificate Course on Basic Python Programming and Data Manipulation

Duration: 30 hours

Strength: Maximum 35 students

Syllabus:

- **Topic 1: Introduction to Python Programming (6 hours):**
 - Setting up Python environment
 - Writing and executing Python scripts
 - Basic syntax and data types
- **Topic 2: Functions and Modules (6 hours):**
 - Defining and calling functions
 - Function arguments and return values
 - Python modules
- **Topic 3: Python Libraries and Packages (6 hours):**
 - NumPy
 - Pandas
 - Matplotlib
- **Topic 4: Advanced Data Manipulation (6 hours):**
 - Grouping and aggregating data
 - Merging and joining data frames
- **Topic 5: Project Work and Final Project Presentation (6 hours):**
 - Small project
 - Final project presentation

Faculty:

Krishnendu Sinha, Assistant Professor in Zoology, Jhargram Raj College (Course Coordinator).

Centre: Jhargram Raj College, Jhargram

Attendance: Minimum 70% attendance

Examination: At the end of the course for those with minimum attendance

Certificate: For all who appeared in the examination and scored minimum of 40%

Course Fees: Nil

Course Outcome

Course I: Ethnomedicinal Studies

Course Outcome Report: Ethnomedicinal Study

Upon completing the course, students will be able to:

- Deduce the connection between Ayurveda (A part of the Indian Knowledge System) and modern-day healing practices.
- Identify ethnomedicinal plants and recognize their traditional medicinal uses.
- Explore methods for conserving these valuable plant resources.
- Study the taxonomic traits of plants.
- Learn about the active phytochemical components of locally accessible ethnomedicinal plants through a literature review.

Course II: FORTRAN: Basics and Numerical Applications

COURSE OUTCOME: FORTRAN: BASICS AND NUMERICAL APPLICATIONS

Jhargram Raj College successfully organized a workshop on “**Fortran: Basics and Numerical Applications**” fromtoKeeping in mind the growing demands of programming in academics and professional era it was a timely enterprise from our end. At the same time programming has been incorporated in the newly launched syllabus of CCFUP under NEP. Modern research cannot progress without programming.

In this workshop we have covered the basic language of Fortran along with the syntax. We have given emphasis on the algorithm and flowchart before writing the actual programs for various simple problems in Fortran. We wanted to give the message that if the algorithm is clear then programming language did not matter. We then introduced various numerical methods such as differentiation, integrations, matrix algebra, root finding methods, interpolations, statistical analysis of data etc., and implemented them by writing codes in Fortran. Various physically and chemically motivated problems had been solved using the codes which the participants developed during the workshop. The resource persons were extremely efficient to fulfil the aim of this workshop.

It drew a huge attention to a very large number of students of various departments of this college as well as other colleges and universities of West Bengal. They have put down encouraging comments and suggestions in the feedback forms. This is a clear indications that they were benefit out of this workshop and became interested in pursuing programming in their future academic and professional career.

Course III: Income Tax E-Filing

An outline of the course outcomes of the **Certificate Course on Income Tax E-Filing** is as follows:

Course Outcomes for Certificate Course on Income Tax E-Filing

***Module A: Introduction ***

1. ***Comprehensive Understanding of Income Tax:***

- Grasp the fundamental principles and concepts of income tax.
- Understand different categories of taxpayers and their respective obligations.

2. ***Knowledge of Taxable and Non-Taxable Income:***

- Differentiate between taxable and non-taxable income sources.
- Recognize various types of income such as salaries, business income, capital gains, and other sources.

3. ***Familiarity with Deductions and Exemptions:***

- Learn about various deductions and exemptions available under income tax laws.
- Understand how to apply these deductions and exemptions to minimize tax liability.

****Module B: E-Filing – Theoretical Aspects****

4. ***Proficiency in E-Filing Terminology and Concepts:***

- Understand key terminology and concepts related to e-filing of income tax.
- Learn about the evolution and importance of e-filing in modern tax administration.

5. ***Knowledge of Legal Framework and Compliance:***

- Gain insights into the legal framework governing e-filing.
- Understand compliance requirements and the consequences of non-compliance.

****Module C: E-Filing Process (Practical)****

6. ***Mastery of ITR Forms and Their Usage:***

- Identify different Income Tax Return (ITR) forms and their specific applications.
- Learn to select and fill out the appropriate ITR form based on the taxpayer's profile.

7. ***Proficiency in Using the Income Tax Calculator:***

- Use the income tax calculator to accurately compute tax liabilities.
- Understand how to input data correctly to derive accurate tax calculations.

8. *Understanding and Utilization of Form 26AS:*

- Learn the significance of Form 26AS in e-filing.
- Understand how to access and utilize Form 26AS to verify tax credits and deductions.

9. *Step-by-Step Process of E-Filing:*

- Master the complete process of filing income tax returns electronically.
- Gain hands-on experience through guided practice sessions in e-filing.

10. *Payment of Advance Tax and Self-Assessment:*

- Learn about the basic concept of Advance Tax and different types of Self Assessment with respect to Income Tax.
- To ensure the payment of Advance Taxes on regular intervals within the due dates electronically.

****Module D: TDS Returns ****

11. *Understanding of TDS Rules and Regulations:*

- Learn the rules and regulations governing Tax Deducted at Source (TDS).
- Understand the responsibilities of deductors and the implications for deductees.

12. *Proficiency in E-Filing of TDS Returns:*

- Gain the skills to accurately e-file TDS returns.
- Understand the forms and documentation required for TDS compliance.

Overall Course Outcomes: -

By the end of this certificate course, students will be able to:

- ***Comprehend and Apply Income Tax Concepts:*** Gain a solid understanding of basic income tax concepts, deductions, and exemptions.
- ***Efficiently Use E-Filing Systems:*** Develop proficiency in theoretical aspects of e-filing and navigate e-filing portals effectively.
- ***Accurately File Income Tax Returns:*** Accurately prepare and e-file income tax returns using the appropriate ITR forms, tax calculators, and Form 26AS.
- ***Handle TDS Compliance:*** Understand and comply with TDS rules and effectively e-file TDS returns.
- ***Ensure Legal and Ethical Compliance:*** Maintain adherence to legal standards and ethical considerations in all tax-related activities.

These outcomes will prepare participants to confidently manage and execute income tax e-filing tasks, both for personal and professional purposes.

Course IV: Social Formation and the Cultural Patterns of the Ancient World

Course Outcome: Social Formations and the Cultural Patterns of the Ancient World

Upon completion of this course the student shall be able to

- Examine the historical evolution of the relationship between humans and their environment, resources, and societal groups over extended periods.
- Emphasize that human civilization has been shaped by decisions and actions influenced by ecological and biological contexts, with technological advancements and cultural cognition playing a pivotal role.
- Highlight early agricultural practices' importance and social complexities' emergence.
- Investigate the development of states and urban civilizations during the early Bronze Age.
- Explore the interconnected histories of the ancient world, reconstructing its narratives and gaining a deeper insight into historical methodologies and perspectives.

Course Outcome: ECOLOGY AND ETHICS IN ANCIENT INDIAN PHILOSOPHY

Here are some potential course outcomes for the course "Ecology and Ethics in Ancient Indian Philosophy".

After completing this course, students will be able to:

1. Analyze the ecological and ethical concepts in ancient Indian philosophical texts, such as the Upanishads, the Bhagavad Gita, and the teachings of Buddhism and Jainism.
2. Understand the historical and cultural context of ancient Indian philosophy and its relevance to contemporary environmental and ethical issues.
3. Critically evaluate the concepts of dharma (duty), karma (action), and ahimsa (non-violence) in relation to ecological sustainability and social justice.
4. Apply the principles of ancient Indian philosophy to modern environmental and ethical challenges, such as climate change, conservation, and social responsibility.
5. Develop a nuanced understanding of the interconnectedness of human and natural worlds, and the ethical implications of this relationship.
6. Articulate a personal philosophy of ecology and ethics, informed by ancient Indian thought, and apply it to real-world problems and situations.
7. Students will learn about the Environmental awareness mentioned in the Vedas Upanishads, Ramayana, Mahabharata, Gita, Puranas and Jain and Buddhist Philosophy and they will protect nature for future generations.

These course outcomes will enable students to engage with ancient Indian philosophy in a meaningful and relevant way, applying its insights to contemporary ecological and ethical challenges.

Course VI: Basic Python Programming and Data Manipulation

Course Outcome Report: Certificate Course on Basic Python Programming and Data Manipulation

Upon completion of the Certificate Course on Basic Python Programming and Data Manipulation at Jhargram Raj College, participants will be equipped with fundamental skills in Python programming and data manipulation techniques. Specifically, they will demonstrate proficiency in setting up a Python environment, writing, and executing Python scripts, while effectively applying basic syntax and utilizing various data types. They will also understand the concepts of functions and modules, including defining, calling functions, managing function arguments, and utilizing Python modules. Additionally, participants will learn to utilize Python libraries and packages such as NumPy, Pandas, and Matplotlib for data manipulation and visualization tasks. Advanced data manipulation techniques, including grouping, aggregating data, merging, and joining data frames, will be covered. Engaging in project work, participants will apply their acquired skills to develop a small project and effectively present their final project. Faculty guidance will be provided by Krishnendu Sinha, Assistant Professor in Zoology, Jhargram Raj College, who serves as the Course Coordinator. The course, located at Jhargram Raj College, Jhargram, mandates a minimum attendance requirement of 70% to qualify for the examination, which will be conducted at the end of the course. Certificates will be awarded to all participants who appear in the examination and achieve a minimum score of 40%. Importantly, there are no fees associated with this course.