



Manoharbai Shikshan Prasarak Mandal Armori's

**Rashtrapita Mahatma Gandhi Arts & Science College,
Nagbhid, Dist-Chandrapur 441205**

Accredited by NAAC 'B' Grade
(Affiliated to Gondwana University, Gadchiroli)

www.rmgcollegenagbhid.in



**SELF STUDY REPORT [SSR]
CYCLE - II (2017-2022)**

Criterion No - I

Metric No - 1.3.1

Metric Name - Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum



Manoharbai Shikshan Prasarak Mandal, Armori's
**RASHTRAPITA MAHATMA GANDHI ART'S & SCIENCE
COLLEGE, NAGBHID, DIST. CHANDRAPUR**
Accredited by NAAC 'B' Grade
(Affiliated to Gondwana University, Gadchiroli)

Officiating Principal
Dr. G. D. Deshmukh
M. Sc., Ph.D., NET

STD: 07179
Office: 295404
Website: www.rmgcollegenagbhid.in

Email: - gdnagbhir72@gmail.com

nagbhid.rmgcollege@gmail.com

Letter No. RMGCN/ /2023

Date: / /2023

Declaration

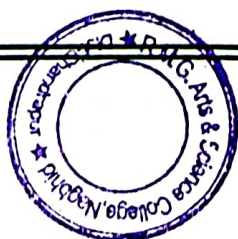
This is to declare that the information, reports, true copies etc. given in this file as a supporting documents is verified by IQAC and found correct.


Dr. G. D. Deshmukh
Officiating Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur



Index

Sr. No.	Title	Page No
1	Syllabus of Curriculum	01 - 02
2	Crosscutting Issues reflects in the syllabus	03 - 12
3	Crosscutting Issues relevant to Human Values	13 - 24
4	Crosscutting Issues relevant to Environment and sustainability	25 - 31
5	Crosscutting Issues relevant to Professional Ethics	32 - 34
6	Crosscutting Issues relevant to Gender	35 - 37




Officiating Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

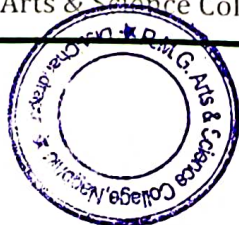


**Manoharbhair Shikshan Prasarak Mandal Armori's
Rashtrapita Mahatma Gandhi Arts and Science
College, Nagbhid, Dist - Chandrapur (M.S.) 441205**

Accredited by NAAC 'B' Grade
(Affiliated to Gondwana University, Gadchiroli)
Website- www.rmgcollegenagbhid.in

Criteria:-1.3.1. - Cross cutting issues relevant to Gender, Environment and sustainability, Human Values and Professional Ethics into the Curriculum

Sr. No.	Program	Course	Topics/ Syllabus	Cross Cutting Issues
1	B.A. / B.Sc.	Compulsory English, Marathi, Pali	All Topics	Relevant to Gender, Environment and sustainability, Human Values and Professional Ethics into the Curriculum
2	B.A. / B.Sc.	Compulsory Environmental Studies	All Topics	Environment and sustainability,
3	B.A. / B.Sc.	A skill enhancement compulsory course in Democracy, Elections and good governance.	All Topics	Human Values and Professional Ethics
4	B.A. Sem III	Sociology	Indian Society: The Structural Issues (Issues and Problems)	Gender and Human Values
5	B.A. Sem IV	Sociology	Social Problems in contemporary India	Gender and Human Values
6	B.A. Sem III	Political Science	Theories of Social Change	Gender and Human Values
7	B.A. Sem III	Geography	Geomorphology	Environment and sustainability,
8	B.A. Sem IV	Geography	Geomorphology and Oceanography	Environment and sustainability,
9	B.Sc. Sem II Paper V	Microbiology	Water microbiology, sewage microbiology and milk borne diseases	Environmental Issue
10	B.Sc. Sem, I Paper II	Life Science (Botany, Zoology)	Biodiversity and Its Conservation/ Environmental Biology	Environmental Issue
11	B. Sc. Sem V	Chemistry	Green Chemistry	Environmental Issue



Officiating Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

SYLLABUS

BACHELOR OF ARTS

ALL SUBJECTS	B.A. - I	https://unigug.ac.in/portal/web_site_attachment/files/New%20Syllabus%20B.%20A.%20Sem%20I%20%26%20II%20.pdf
	B. A. - II	https://unigug.ac.in/portal/web_site_attachment/files/B.A.%20CBCS%20III%20%26%20IV%20Update%20180719.pdf
	B. A. - III	https://unigug.ac.in/portal/web_site_attachment/files/B_A_%20syllabus%20V%26VI%20sem%20221119.pdf

BACHELOR OF SCIENCE

LANGUAGES	B. Sc. - I (ENG)	https://unigug.ac.in/portal/web_site_attachment/files/BCom%20Sem%20I%20and%20II%20Comp%20Eng.pdf
	B. Sc. - I (MAR)	https://unigug.ac.in/portal/web_site_attachment/files/BCom%20Sem%20I%20and%20II%20Comp%20Marathi.pdf
CHEMISTRY	B. Sc. - I	https://unigug.ac.in/portal/web_site_attachment/files/Chemistry%20Sem%20I%20and%20II%20120617.pdf
	B. Sc. - II	https://unigug.ac.in/portal/web_site_attachment/files/BSc_Chemistry%20Sem%20III%20and%20IV%20CBCS.pdf
	B. Sc. - III	https://unigug.ac.in/portal/web_site_attachment/files/Chemistry%20%20SYLLABUS%20%20final%2031-05-19.pdf
BOTANY	B. Sc. - I	https://unigug.ac.in/portal/web_site_attachment/files/B.Sc.%20Botany%20I%20%26%20II.PDF
	B. Sc. - II	https://unigug.ac.in/portal/web_site_attachment/files/BSC%20botany%20semIII%20%26%20IV%20CBCS.pdf
	B. Sc. - III	https://unigug.ac.in/portal/web_site_attachment/files/B_Sc_%20Botany%20V%20%26%20VI.PDF
ZOOLOGY	B. Sc. - I	https://unigug.ac.in/portal/web_site_attachment/files/Zoology - Sem I and II- PDF converted-converted_1.pdf
	B. Sc. - II	https://unigug.ac.in/portal/web_site_attachment/files/BSC%20Zoology%20Sem%20III%20%26%20IV%20CBCS.pdf
	B. Sc. - III	https://unigug.ac.in/portal/web_site_attachment/files/Zoology-CBCS- Syllabus for Sem V and Sem VI.pdf
MICRO- BIOLOGY	B. Sc. - I	https://unigug.ac.in/portal/web_site_attachment/files/Syllabus_MB_CBCS_Sem_I_II.pdf
	B. Sc. - II	https://unigug.ac.in/portal/web_site_attachment/files/Syllabus_B_SC_MB_CBCS_SEM-III-IV.pdf
	B. Sc. - III	https://unigug.ac.in/portal/web_site_attachment/files/UGC_Core_syllabus_SEM_V-VI.pdf
PHYSICS	B. Sc. - I	https://unigug.ac.in/portal/web_site_attachment/files/Physics_Sem_I_and_II_CBCS%20PDF%201.pdf
	B. Sc. - II	https://unigug.ac.in/portal/web_site_attachment/files/BSC%20Physics%20Sem%20III%20%26%20IV%20CBCS.pdf
	B. Sc. - III	https://unigug.ac.in/portal/web_site_attachment/files/B_Sc_%20V%20%26%20VI%20%20%20%20syllabus%20Physics.pdf
MATHEMATICS	B. Sc. - I	https://unigug.ac.in/portal/web_site_attachment/files/BSC%20Mathematics%20Sem%20I%20and%20II%20070817.pdf
	B. Sc. - II	https://unigug.ac.in/portal/web_site_attachment/files/BSC%20Mathematics%20Sem%20III%20%26%20IV%20CBCS.pdf
	B. Sc. - III	https://unigug.ac.in/portal/web_site_attachment/files/Mathematics%20BSc%20Sem%20V%20%26%20VI%20syllabus%201-6-2019%20new.pdf
COMPUTER SCIENCE	B. Sc. - I	https://unigug.ac.in/portal/web_site_attachment/files/BSc%20CS%20CBCS%20Sem%20I%20and%20II%20070817.pdf
	B. Sc. - II	https://unigug.ac.in/portal/web_site_attachment/files/B_Sc%20Sem%20III%20%26%20IV%20CBCS.pdf
	B. Sc. - III	https://unigug.ac.in/portal/web_site_attachment/files/BSc_CS_V_VI_Revised.pdf



SYLLABUS

BACHELOR OF ARTS

ALL SUBJECTS	B.A. - I	https://unigug.ac.in/portal/web_site_attachment/files/New%20Syllabus%20B.%20A.%20Sem%20-I%20%26%20II%20.pdf
	B. A. - II	https://unigug.ac.in/portal/web_site_attachment/files/B.A.%20CBCS%20III%20%26%20IV%20Update%20180719.pdf
	B. A. - III	https://unigug.ac.in/portal/web_site_attachment/files/B_A_%20syllabus%20V%26VI%20sem%20221119.pdf

BACHELOR OF SCIENCE

LANGUAGES	B. Sc. - I (ENG)	https://unigug.ac.in/portal/web_site_attachment/files/BCom%20Sem%20I%20and%20II%20Comp%20Eng.pdf
	B. Sc. - I (MAR)	https://unigug.ac.in/portal/web_site_attachment/files/BCom%20Sem%20I%20and%20II%20Comp%20Marathi.pdf
CHEMISTRY	B. Sc. - I	https://unigug.ac.in/portal/web_site_attachment/files/Chemistry%20Sem%20I%20and%20II%20120617.pdf
	B. Sc. - II	https://unigug.ac.in/portal/web_site_attachment/files/BSc_Chemistry%20Sem%20III%20and%20IV%20CBCS.pdf
	B. Sc. - III	https://unigug.ac.in/portal/web_site_attachment/files/Chemistry%20%20SYLLABUS%20%20final%2031-05-19.pdf
BOTANY	B. Sc. - I	https://unigug.ac.in/portal/web_site_attachment/files/B.Sc.%20Botany%20I%20%26%20II.PDF
	B. Sc. - II	https://unigug.ac.in/portal/web_site_attachment/files/BSC%20botany%20semIII%20%26%20IV%20CBCS.pdf
	B. Sc. - III	https://unigug.ac.in/portal/web_site_attachment/files/B_Sc_%20Botany%20V%20%26%20VI.PDF
ZOOLOGY	B. Sc. - I	https://unigug.ac.in/portal/web_site_attachment/files/Zoology - Sem I and II- PDF converted-converted_1_.pdf
	B. Sc. - II	https://unigug.ac.in/portal/web_site_attachment/files/BSC%20Zoology%20Sem%20III%20%26%20IV%20CBCS.pdf
	B. Sc. - III	https://unigug.ac.in/portal/web_site_attachment/files/Zoology-CBCS- Syllabus for Sem V and Sem VI.pdf
MICRO- BIOLOGY	B. Sc. - I	https://unigug.ac.in/portal/web_site_attachment/files/Syllabus_MB_CBCS_Sem I_II.pdf
	B. Sc. - II	https://unigug.ac.in/portal/web_site_attachment/files/Syllabus_B_SC_MB_CBCS_SEM-III-IV.pdf
	B. Sc. - III	https://unigug.ac.in/portal/web_site_attachment/files/UGC_Core_syllabus_SEM_V-VI.pdf
PHYSICS	B. Sc. - I	https://unigug.ac.in/portal/web_site_attachment/files/Physics_Sem I and II CBCS%20PDF%201.pdf
	B. Sc. - II	https://unigug.ac.in/portal/web_site_attachment/files/BSC%20Physics%20Sem%20III%20%26%20IV%20CBCS_.pdf
	B. Sc. - III	https://unigug.ac.in/portal/web_site_attachment/files/B_Sc_%20V%20%26%20VI%20%20%20syllabus%20Physics.pdf
MATHEMATICS	B. Sc. - I	https://unigug.ac.in/portal/web_site_attachment/files/BSC%20Mathematics%20Sem%20I%20and%20II%20070817.pdf
	B. Sc. - II	https://unigug.ac.in/portal/web_site_attachment/files/BSC%20Mathematics%20Sem%20III%20%26%20IV%20CBCS.pdf
	B. Sc. - III	https://unigug.ac.in/portal/web_site_attachment/files/Mathematics%20BSc%20Sem%20V%20%26%20VI%20syllabus%201-6-2019%20new.pdf
COMPUTER SCIENCE	B. Sc. - I	https://unigug.ac.in/portal/web_site_attachment/files/BSc%20CS%20CBCS%20Sem%20I%20and%20II%20070817.pdf
	B. Sc. - II	https://unigug.ac.in/portal/web_site_attachment/files/B_Sc%20Sem%20III%20%26%20IV%20CBCS.pdf
	B. Sc. - III	https://unigug.ac.in/portal/web_site_attachment/files/BSc_CS_V_VI_Revised.pdf

Crosscutting Issues reflects in the syllabus
Relevant to Gender, Environment and sustainability, Human
Values and Professional Ethics in Compulsory English

GONDWANA UNIVERSITY, GADCHIROLI
SYLLABUS OF COMPULSORY ENGLISH

To be implemented from 2017-18

Semester I

Unit I : Prose

- | | |
|-------------------------------------|--------------------|
| 1. Strong Roots | Dr.APJ Abdul Kalam |
| 2. Maintaining Democracy | Dr.B.R.Ambedkar |
| 3.Black Money and the Black Economy | C.Rammanohar Reddy |

Unit II : Poetry

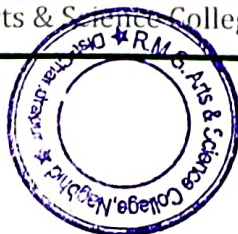
- | | |
|---|----------------------|
| 1. Where the Mind is without Fear | Rabindranath Tagore |
| 2. Stopping by Woods on a Snowy Evening | Robert Frost |
| 3. Seven Ages of Man | Williams Shakespeare |


Unit III : Grammar

- A. Articles
- B. Prepositions
- C. Tenses-(Present Continuous, Past Continuous, Past Perfect)

Unit IV : Communication Skills

- A. Congratulating and Responding to Congratulations
- B. Asking for, Giving and Refusing Permission
- C. Job application.
- D. Curriculum Vitae (CV).




Officiating Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

Crosscutting Issues reflects in the syllabus Relevant to Gender, Environment and sustainability, Human Values and Professional Ethics in Compulsory Pali

गोंडवाना विद्यापीठ गडचिरोली

पालि आवश्यक

सत्र १ (सन २०१७-१८)

युनिट १

गुण १६+४ = २०

पञ्जोपाठो (गद्यपाठ)

आतक कथा

१) बरुजातक

२) सुमुमार

विनयपिटक (पद्यवर्ग)

१) पञ्चतन्त्रकथा

२) मुचलिनदकथा

युनिट २

गुण १६ + ४ = २०

पञ्जोपाठो (पद्यपाठ)

देरीपत्तवा

१) किन्नासिनोथेरो

२) पुष्पाथेरो

धम्मपद

१) बालवग्ग

२) पण्डितवग्ग

युनिट ३

गुण १६+ ४=२०

अनुपिटक साहित्य

मिलिंदपञ्चो

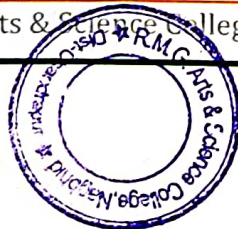
१) नागसेनस्य पञ्चजना

२) राजा मिलिंद नागसेनस्य सनागम

विदुदशीपण

१) निल्लोसम

२) मेलाभायनाकथा



(Signature)
Officiating Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhir, Dist. Chandrapur

Crosscutting Issues reflects in the syllabus
Relevant to Gender and Human Values in Political Science

GONDWANA UNIVERSITY, GADCHIROLI
Syllabus for C.B.C.S. in Political Science (Sem. I)
Session 2017-18

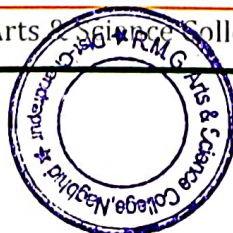
PAFC02: INTRODUCTION TO HUMAN RIGHTS

- Unit 1 : Concept of Human Rights :**
1.1 : Meaning and definition of human rights.
1.2 : Nature and scope of Human Rights.

- Unit 2 : Theory of Human Rights :**
2.1 : Natural and liberal theory.
2.2 : Marxist and social theory.

- Unit 3 : Human Right Movement in India :**
3.1 : National freedom movement.
3.2 : Dalit and women's movement.

- Unit 4 : Universal Declaration of human rights :**
4.1 : Historical background of universal declaration of human rights.
4.2 : Various articles in universal declaration of human rights.



Officiating Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

Crosscutting Issues reflects in the syllabus

Relevant to Gender and Human Values in Sociology

GONDWANA UNIVERSITY, GADCHIROLI

B.A. II (Sociology)

Indian Society : The structural Issues

Sem III

Objectives of the paper –

1. The paper aims at acquainting the students with Indian Society in terms making them know the issues problems confronting the institutions of castes family.

UNIT – I : Social problems

1. Concept, meaning and definition of Social problems,
2. Characteristics of Social problems.
3. Causes of Social problems.
4. Approaches of Social problems.

UNIT – II : Indian Society , Structure and Inequality

1. Castes a structure of inequality and discrimination
2. Problems of scheduled Castes and other Backward Castes
3. Constitutional provisions for Scheduled Castes –
4. Mandal Commission for other Backward Castes

UNIT- III : Family in Contemporary India

1. Intra and inter generational conflict, meaning causes and remedial measures
2. Dowry , divorce and Domestic Violence – Meaning, Causes and remedial measures
3. Problems of elderly people – Meaning problems of elderly people i.e. physical, economic, social, health, psychological, suggestions to reduce their problems.

UNIT – IV Rural Community in India

1. Migration – Its causes and consequences
2. Unemployment :- Causes and consequences
3. Farmer's Suicide :- meaning Causes and its impact

Crosscutting Issues reflects in the syllabus Relevant to Gender and Human Values in Sociology

GONDWANA UNIVERSITY, GADCHIROLI

B.A. II (Sociology)

Social Problems in contemporary India

Sem – IV

Objectives of the paper –

1. The paper is based on the problems the society in India is facing at presents.
2. The paper thus intends the make the students know the nature, causes and consequences of those problems as well as the measures to put a check on them.

UNIT – I : Displacement and Rehabilitation :

1. Displacement :- Meaning Causes and Consequences
2. Rehabilitation :- concept problems and plans.

UNIT – II : Intolerance, Riot and Crime

1. Cast , religious and cultural intolerance
2. Concept of communal riot, caste and ethnic conflict.
3. Violence and crime against women and the Marginalized.
4. Remedial Measures on intolerance, riots and crime.

UNIT – III : Corruption

1. Meaning, Definition and types of corruption.
2. Factors inducing corruption.
3. Remedial Measures on corruption.

UNIT – IV : Population Problems.

1. Population profile : Population Explosion, Causes of Population, Consequences of Population
2. Planning for Population control.
3. Population Education :- Its social Economic and Political dimensions.



Crosscutting Issues reflects in the syllabus Relevant Environment and sustainability in Geography

Gondwana University, Gadchiroli

B. A. Geography

Semester- I (Core Subject)

Semester Exam: 60 Marks

Internal Assessment : 15 Marks

Introduction to Geography

Unit - I

The Nature of Geography - Meaning, Definition, Scope, Approach, Objectives, Relevance and Development of Geography; Place of Geography in the Classification of Sciences; Branches of Geography; Geography and other disciplines.

Unit - II

The Physical Dimension in Geography; The Universe; The Solar System; Earth as an Unique Planet; Phases of Moon; The Earth Movement; Shape of the Earth; Latitudes; Longitudes & Time zones and time calculation.

Unit - III

Geography as a study of Environment; Man-Environment; Ecology and Ecosystem; Environmental determinism, Possiblism, Neo-determinism; Dualism in geography- Systematic / Regional, Physical / Human; Complementarity.

Unit - IV

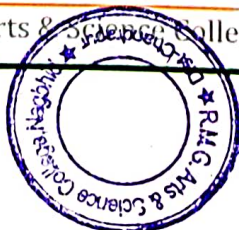
A brief Historical overview of Geography as a discipline; Recent Trends in Geography with special reference to India; Imperatives for the future; Modern Concepts in Geography; Career Opportunities for Geographers.



Crosscutting Issues reflects in the syllabus

Relevant Environment and sustainability in Microbiology

Microbiology B. Sc. I Semester-II (CBCS)		
Course Code - USMBT04	Paper - II	Marks - 50
Credits: 2		Total Hours :48
APPLIED MICROBIOLOGY		
Objective: To make the students to understand and aware the fundamentals of National Mission on Environmental cleanliness, health and hygiene.		
Unit No	Content	Hrs.
1	Air Microbiology a. Definition and composition of air. b. Sources of microorganisms in air. c. Enumeration of microorganisms in air: Solid and liquid impingement technique (Lemon sampler, Anderson sampler) d. control of microorganisms in air: Room sterilization techniques (radiation, fumigation, laminar air flow) e. droplet, aerosol droplet nuclei and droplet infection, air borne diseases(list with causative organisms)	12
2	Water Microbiology: a. Definition, Types of water sources, Types of waters, b. Sources and types of microorganisms in water b. Significance of microorganisms in water, Pure (safe/potable) & polluted water c. Indicators of excretal pollution. d. Collection and handling of water sample for analysis e. Bacteriological analysis of water for coliforms(MTDT, MPN) f. Identification of faecal and non-faecal coliforms by (IMViC and Eijkmann test) g. Water treatment using RSF h. Chlorination of water (mechanism), different methods i. Water borne diseases(List with causative organisms)	12
3	Sewage Microbiology a. Definition and types of sewage, composition and strength of sewage (BOD, COD, ThOD), b. Microbiology of sewage, c. General municipal sewage treatment method, d. Preliminary, Primary and Secondary sewage treatment methods. e. Water reclamation.	12
4	Milk Microbiology a. Definition and composition of milk, sources of contamination of milk. b. Desirable and undesirable changes in milk. c. Milk borne diseases (List with causative organisms). d. Bacteriological examination of milk by SPC, DMC, Reductase test (MBRT), checking of pasteurization of milk by phosphatase test. e. Milk products- Cheese, yoghurt (production)	12



Crosscutting Issues reflects in the syllabus Relevant Environment and sustainability in Botany

SEMESTER – IV

Paper – II

Plant Ecology

(48 Periods)

UNIT – I: (12 Periods)

1. **Ecology:** Plant and Environment, branches of ecology and significance.
2. **Climatic Factors:** Atmosphere, Light, Temperature.
3. **Edaphic Factors:** Pedogenesis (process), Soil profile and properties (Physical and Chemical).
4. **Biotic Factors:** Interactions between plants and animals, interaction between plants growing in a community, interactions between plants and soil microorganisms.

UNIT – II: (12 Periods)

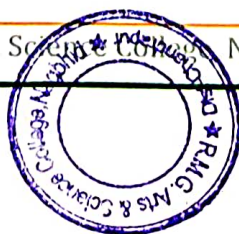
1. **Ecosystem:** Structure, Biotic and Abiotic components, Food chains, Food web, Ecological pyramid.
2. **Biogeochemical Cycles:** Water, Carbon, Nitrogen.
3. **Environmental Pollution:** Air, Water and its control.

UNIT – III: (12 Periods)

1. **Autecology:** Definition, parameters and importance, growth curve, interaction among population, ecad, ecotype- characteristics and importance.
2. **Synecology:** Life forms, Community dynamics, study of community (analytical and synthetic characters).

UNIT – IV: (12 Periods)

1. **Plant Succession:** Definition, causes of succession, Climax concept; Hydrosere, Xerosere.



Crosscutting Issues reflects in the syllabus Relevant Environment and sustainability in Zoology

**GONDWANA UNIVERSITY, GADCHIROLI
CHOICE BASED CREDIT SYSTEM(CBCS) SYLLABUS
PROGRAMME – BACHLOR OF SCIENCE(B.Sc.), SEMESTER – V
SUBJECT – ZOOLOGY THEORY(CREDIT 2)
DISCIPLINE SPECIFIC ELECTIVES (DSE) CORE PAPER – XII
USCZOT12
PAPER – IV – AQUATIC BIOLOGY
Max. Marks: 50**

UNIT – I

12 periods

1. Brief introduction of the aquatic biomes
2. Freshwater ecosystem (lakes, streams and rivers),
3. Estuaries, intertidal zones,
4. Oceanic pelagic zone and benthic zone.

UNIT – II

12 periods

1. Lakes: Origin and classification, Ecosystem and Morphometry
2. Physico-chemical Characteristics: Light, Temperature, Turbidity, Dissolved Solids, Carbonate, Bicarbonates, Phosphates and Nitrates, Dissolved gases (Oxygen, Free Carbon dioxide).
3. Nutrient Cycles in Lakes-Nitrogen, Sulphur and Phosphorous
4. Study of Zooplankton -Rotifers, Cladocera, Copepoda and Ostracoda

UNIT III

12 Periods

1. Marine Ecosystem, Salinity and density of Sea water, Continental shelf.
2. Adaptations of deep sea organisms.
3. Coral reefs, Sea weeds.
4. Nutrient Cycles in Sea/ Ocean -Nitrogen, Sulphur and Phosphorous.



Officiating Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

Crosscutting Issues reflects in the syllabus Relevant Environment and sustainability in Chemistry

**Discipline Specific Elective Chemistry
(Choose any two)
B.Sc.III (SemesterV) (CBCS)
USC DSE ChT 09**

Total marks: 50 Total Lectures: 48

Note: Figures to the right hand side indicate number of lectures

Discipline Specific Elective Chemistry I (Organic Chemistry)

UNIT IV

Green Chemistry and Technology for sustainable development

Green Chemistry from theory to practice The twelve principles of green chemistry Green Chemistry and sustainable Development Designing Products under the holistic approach “Cardle-to Cardle” Scientific areas for practical applications of green chemistry Use of alternative basic chemicals as feed stocs in chemical industry and research Green Chemistry and Reduction of solvent Toxicity (Alternative Solvents or replacement)Applications of New Methodologies in the synthesis of chemical compounds- catalysis and green chemistry. Green Chemistry and Toxic organic solvents Green solvents and Alternative methods Green Chemistry, Green solvents – Alternative techniques in organic synthesis. (12L)



Crosscutting Issues relevant to Human Values



Latitude: 20.593916
Longitude: 79.676836
Elevation: 240.03 m
Accuracy: 30.6 m
Time: 10-08-2021 11:45
Note: रोग निदान व रक्तदान शिबीर

Powered by NoteCam

Organization of Blood Donation Camp at College.



रक्तदान श्रेष्ठ दान

मनोहरभाई शिक्षण प्रसारक मंडळ आरमोरी द्वारा संचालित
**राष्ट्रपिता महात्मा गांधी कला व विज्ञान महाविद्यालय,
नागभीड जि. चंद्रपूर**

रोगनिदान व रक्तदान शिबीर

राष्ट्रीय सेवा योजना विभाग अंतर्गत



स्व. किशोरभाऊ वा. वनमाळी
माजी अध्यक्ष, म.शि.प्र. मंडळ, आरमोरी

स्व. किशोरभाऊ वा. वनमाळी माजी अध्यक्ष, म.शि.प्र. मंडळ, आरमोरी
यांच्या प्रथम पुण्यस्मरण निमित्त "रोगनिदान व रक्तदान शिबीराचे"
आयोजन केले आहे. तरी आपला सहभाग प्रार्थनिय आहे !



**GIVE BLOOD
SAVE LIFE**

स्थळ - राष्ट्रपिता महात्मा गांधी कला व विज्ञान महाविद्यालय, नवखळा, नागभीड
दिनांक - 10/08/2021 मंगळवार वेळ - सकाळी 9 ते 1 वाजेपर्यंत

संपर्क - 8624974526, 9421814811, 9405519509

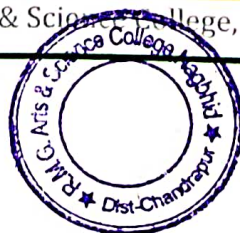
आयोजक-

डॉ. अनिल एन. कोरपेनवार
प्राचार्य
रा. न. गांधी कला व विज्ञान महाविद्यालय, नागभीड

प्रा.पी.पी. होक
कार्यक्रम अधिकारी
रा.से. यो. विभाग

डॉ. आर. जे. रुडे
सह कार्यक्रम अधिकारी

प्रा.के.एस. वोरकर
सह कार्यक्रम अधिकारी



Officially Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

Crosscutting Issues relevant to Human Values

मनोहरभाई शिक्षण प्रसारक मंडळ आरमोरी व्दारा संचालित
राष्ट्रपिता महात्मा गांधी कला व विज्ञान महाविद्यालय,
नागभीड जि. चंद्रपूर
— राष्ट्रीय सेवा योजना विभाग अंतर्गत —
महाविद्यालयीन विद्यार्थीकरिता

कोव्हीड - १९ लसीकरण शिबीर

स्थळ - राष्ट्रपिता महात्मा गांधी कला व विज्ञान महाविद्यालय, नवखवळा, नागभीड
दिनांक - 27/10/2021 बुधवार वेळ - सकाळी 9 ते 1 वाजेपर्यंत

संपर्क - 8624974526, 9421814811, 9405519509

सौजन्य :- राष्ट्रपिता महात्मा गांधी कला व विज्ञान महाविद्यालय नागभीड जि. चंद्रपूर

GONDWANA UNIVERSITY
GADCHIROLI

@STAY STRONG@ @STAY HEALTHY@
#_NSS UNIT_#
R. M. G. College, Nagbhid
#LargestVaccineDrive

ये हम हैं ये कोविड का टीका है
ये हमारा टीकाकरण हो रहा है

दोनों ही टीके सुरक्षित और रोग प्रतिरोधक क्षमता बढ़ाने वाले हैं

डॉ. ए. एन. कोरेवेन्कार प्राचार्य
प्रा. पी. पी. डोक रा.से.पी. कार्यक्रम अधिकारी
प्रा. के. एस. बोरकर

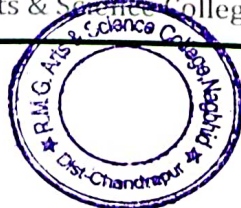
सौजन्य :- राष्ट्रपिता महात्मा गांधी कला व विज्ञान महाविद्यालय, नागभीड



Latitude: 20.59404
Longitude: 79.676752
Elevation: 63.02±23 m
Accuracy: 43.8 m
Time: 27-10-2021 10:35
Note: कोव्हीड - १९ लसीकरण शिबीर 2021

Powered by NoteCam

Organization of Covid – 19 Vaccination Drive at Institution



Officializing Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

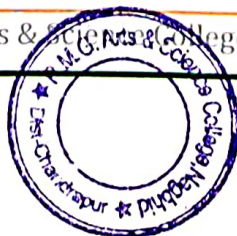
Crosscutting Issues relevant to Human Values



Tribute to Dr. Babasaheb Ambedkar on his Death Anniversary

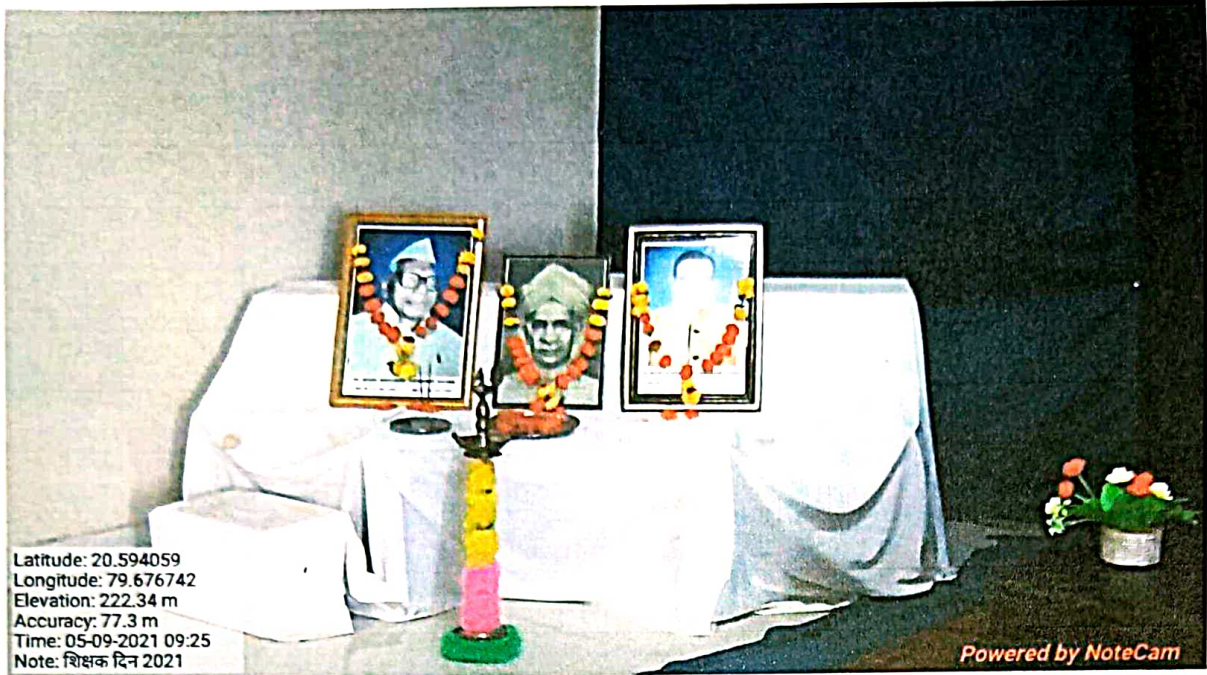


Organization of Late. Vamanraoji Wanmali (Founder President, MSPM) Birth Anniversary



[Signature]
Officiating Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

Crosscutting Issues relevant to Human Values

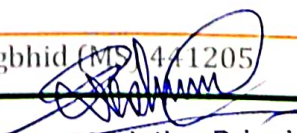


Tribute to Dr. Sarvapalli Radhakrishnan & Celebration of Teachers Day



Tribute to Dr. Sarvapalli Radhakrishnan & Celebration of Teachers Day




Officiating Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

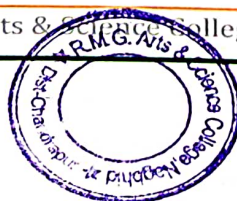
Crosscutting Issues relevant to Human Values



Celebration of National Service Scheme (NSS) Day



Celebration of National Service Scheme (NSS) Day



[Signature]
Officiating Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

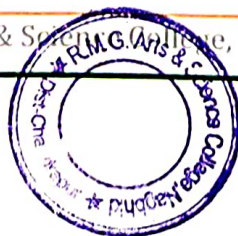
Crosscutting Issues relevant to Human Values



Organization of Rashtrapita Mahatma Gandhi Birth Anniversary & Lal Bahadur Shastri Birth Anniversary



Organization of Rashtrapita Mahatma Gandhi Birth Anniversary & Lal Bahadur Shastri Birth Anniversary



[Signature]
Officiating Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

Crosscutting Issues relevant to Human Values



Organization of Rashtrapita Mahatma Gandhi Birth Anniversary & Lal Bahadur Shastri Birth Anniversary

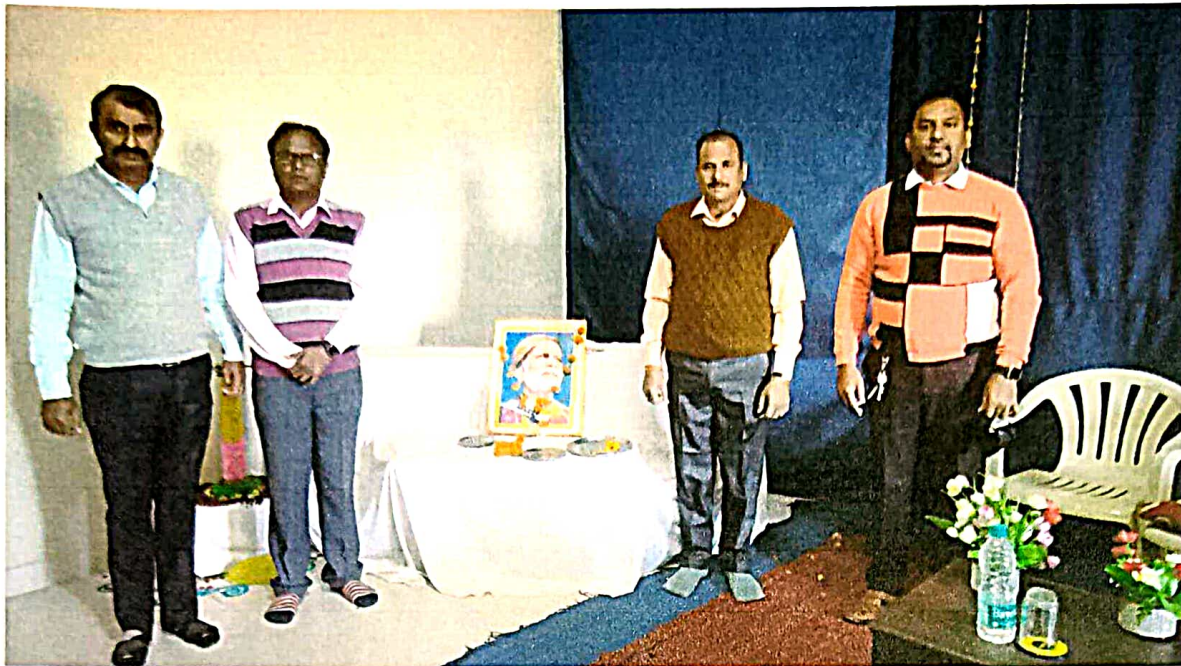


Organization of Rashtrapita Mahatma Gandhi Birth Anniversary & Lal Bahadur Shastri Birth Anniversary



[Signature]
Officiating Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Diet. Chandrapur

Crosscutting Issues relevant to Human Values

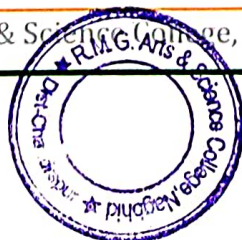


Tribute to Sant Gandge Baba on his Birth Anniversary



Latitude: 20.594017
Longitude: 79.676855
Elevation: 255.87±2 m
Accuracy: 8.6 m
Time: 03-01-2022 10:46
Note: सावित्रीबाई फुले जयंती 2021

Tribute to Savitri Bai Phule on her Birth Anniversary



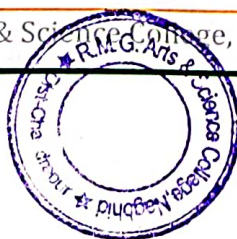
Crosscutting Issues relevant to Human Values



Celebration of National Voters Day

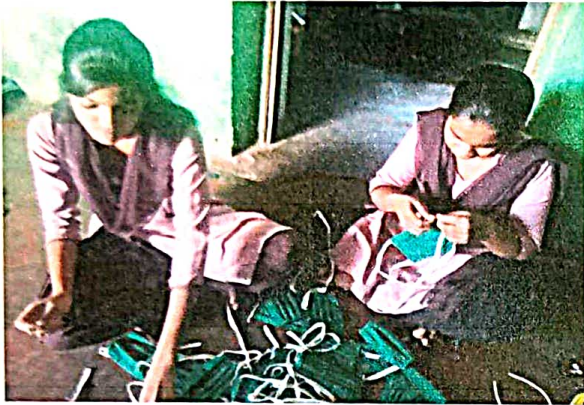


Taking Pledge on National Voters Day



[Signature]
Officiating Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

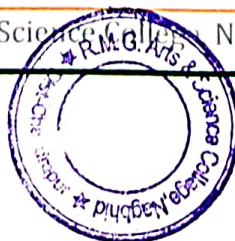
Crosscutting Issues relevant to Human Values



Mask preparation and distribution program during Covid-19



Food distribution program during Covid-19



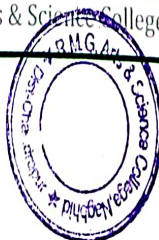
Crosscutting Issues relevant to Human Values



Celebration of Dr. A. P. J. Abdul Kalam Birth Anniversary



Tribute to Chhatrapati Shivaji Maharaj on his Birth Anniversary



Officiating Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

Crosscutting Issues relevant to Human Values



Organization of Fruits distribution program in Rural Hospital, Nagbhid



Organization of Fruits distribution program in Rural Hospital, Nagbhid



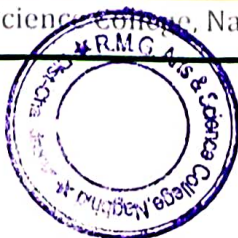
Crosscutting Issues relevant to Human Values



Celebration of Republic Day on 26th February



Celebration of Independence Day on 15th August



Crosscutting Issues relevant to Environment and sustainability

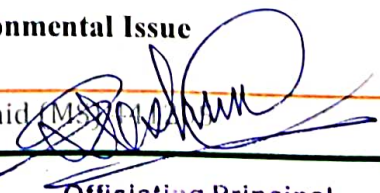


Organization of Tree Plantation in Collage campus



Organization of Field Visit to light up Environmental Issue




Officiating Principal
Rashtrapita Mahatma Gandhi
Art's & Science Collage,
Nagbhid, Dist. Chandrapur

Crosscutting Issues relevant to Environment and sustainability



Organization of Cleanliness drive at Village



Organization of Cleanliness (Weed Removal) drive at college campus



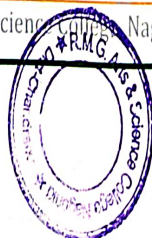
Crosscutting Issues relevant to Environment and sustainability



Organization of Nature Trail on the occasion of Wild Life Week



Reconstruction of Water Body by the students to save water





GONDWANA UNIVERSITY, GADCHIROLI.

Ordinance No. 58 of 2017

Incorporating a Compulsory Course on Environmental Studies In the Under Graduate Courses offered under all the Faculties, ordinance, 2017.

Whereas, it is expedient to provide an ordinance in respect of Incorporating a Compulsory Course on Environmental Studies in the Under Graduate Courses offered under all the Faculties, for the purposes hereinafter appearing, the Management council is hereby pleased to make the following ordinance :

1. This ordinance may be called "Incorporating a Compulsory Course on Environmental Studies in the Under Graduate Courses offered under all the Faculties, ordinance, 2017".
2. This ordinance shall come into force with effect from the date of its making by the Management council.
3. This course will be referred to as compulsory course of Six months duration in Environmental Studies at the under-graduate level of all streams and faculties of higher education under this University and will be taught in second year with course of study and can be cleared in the third year with course of study in case the student/s remain absent on the scheduled day of the examination or fails to pass the course in its first attempt.
4. However excepting the Faculty of Engineering and Technology wherein the aforesaid course shall be taken up during First Year of course of study and that it can be cleared in the second year of course of study in case the student/s remain absent on the scheduled day of the examination or fails to pass the course in its first attempt. student taking direct admission to the second year B.E. course shall be exempted from the fees for the course of environmental studies.
5. Provision of this ordinance will not be applicable to those courses in which the subject on Environmental Sciences has been incorporated as subject of study and examinations such as B.Sc. (Environmental Science) and all other similar cases at the U.G. level."
6. The Principal would appoint Coordinator and Assistant Coordinator as per the need to coordinate the teaching of the course, appoint contributory teachers, if necessary. At the end of the course, the college would conduct the examination. It will appoint paper setters and examiners. The final grades of candidates should be informed to the University in the prescribed format. The expenditure incurred for all the required manpower and necessary support services shall be recovered from the remaining amount of fees.
7. Qualifications of a Teacher: A teacher in any subject possessing relevant knowledge to teach the "Course on Environmental Studies" shall be eligible.
8. This course is also compulsory for external students. In case of external students, they can enroll themselves in any college for the aforesaid course and can complete the same.
9. The admitted undergraduate student/s has to pass in the examination of this course in order to obtain degree from the Affiliating University or alternatively in lieu of the entire course, the given students in the batches of 20 may be assigned a project work consisting of People's/Community Bio-diversity Registers (PBR/CBRs) of any Gram Panchayat as per format prescribed by Bio-diversity Authority of India under the guidance of a teacher which shall be evaluated for 100 marks.



Officiating Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

10. The concerned Faculty can adopt this mandatory course as per the suggested guidelines without or with minor modifications that are deemed to be desirable considering the curricular structure of the given under-graduate course.

11. The syllabus, relevant guidelines regarding the scheme of examination and fees structure are appended with this ordinance as Annexure-A, Annexure-B and Annexure-C respectively.

Annexure- A: Syllabus

Course Code: ES (Compulsory Course)
Title of the Course: Environmental Studies

Unit	Contents	Hrs.
I	The Multidisciplinary nature of environment . Definition, scope and importance. . Need for public awareness – Institutions in environment, people in environment	01
II	Social Issues and the Environment . From Unsustainable to Sustainable development, Urban problems related to energy; Water conservation, rain water harvesting, watershed management . Resettlement and rehabilitation of people; its problems and concerns. Case studies. . Environmental ethics: Issues and possible solutions, resource consumption pattern and need for equitable utilisation, Urban and rural equity issues, need for gender equity . Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies. . Wasteland reclamation - Consumerism and waste products. . Environment Protection Act. . Air (Prevention and Control of Pollution) Act. . Water (Prevention and Control of Pollution) Act. . Wildlife Protection Act. . Forest Conservation Act. . Issues involved in enforcement of environmental legislation. . Public awareness- environmental calendar of activities, self initiation	04
III	Human Population and the Environment . Global population growth, variation among nations, Population explosion - Family Welfare Programmes, methods of sterilization; Urbanization . Environment and human health – climate and health, infectious diseases, water-related diseases, risk due to chemicals in food, cancer and environment . Human Rights – equity, nutrition and health rights, IPRs, community biodiversity registers (CBRs) . Value Education – environmental values, valuing nature, cultures, social justice, human heritage, equitable use of resources, common property resources, ecological degradation . HIV / AIDS; Women and Child Welfare. . Role of Information Technology in Environment and human health. . Case Studies.	03
IV	Natural resources: Renewable and non-renewable resources . Natural resources and associated problems. - Forest resources: Use and over exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people. - Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems. - Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies. - Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer – pesticide problems, water logging, salinity, case studies. - Energy resources: Growing energy needs, renewable and non renewable energy sources, use of alternate energy sources, Case studies. - Land resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification. . Role of an individual in conservation of natural resources. . Equitable use of resources for sustainable lifestyles	04
V	Ecosystems . Concept of an ecosystem- ecosystem degradation, resource utilisation . Structure and function of an ecosystem - Producers, consumers and decomposers. . Energy flow in the ecosystem – water, carbon, oxygen, nitrogen and energy cycles, integration of cycles in nature . Ecological succession - Food chains, food webs and ecological pyramids. . Ecosystem types, characteristic features, structure and functions of the following ecosystem- - Forest ecosystem	03



(Signature)
Officiating Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

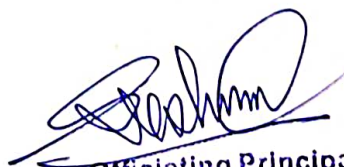
	<ul style="list-style-type: none"> - Grassland ecosystem - Desert ecosystem - Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries) 	
VI	Biodiversity and its conservation <ul style="list-style-type: none"> . Introduction - Definition: genetic, species and ecosystem diversity. . Bio-geographical classification of India. . Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic and optional values. . Biodiversity at global, National and local levels. . India as a mega-diversity nation; Hot-spots of biodiversity. . Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts. . Endangered and endemic plant and animal species of India. . Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity. 	04
VII	Environmental Pollution <ul style="list-style-type: none"> . Definition . Causes, effects and control measures of:- <ul style="list-style-type: none"> - Air pollution - Water pollution - Soil pollution - Marine pollution - Noise pollution - Thermal pollution - Nuclear hazards . Solid Waste Management: Causes, effects and control measures of urban and industrial waste. . Role of an individual and institutions in prevention of pollution. . Disaster management: floods, earthquake, cyclone and landslides. . Pollution case studies. 	04
VIII	Field work <ul style="list-style-type: none"> . Visit to a local area to document environmental assets like river / forest / grass land / hill / mountain etc . Visit to a local polluted site - Urban / Rural / Industrial / Agricultural etc . Study of common plants, insects, birds. . Study of simple ecosystems - pond, river, hill slopes, etc. 	02
Total		25

Annexure– B: Scheme of Examination

Course Scheme					Examination Scheme		
Lectures	Tutorial(s)	Practical	Periods/week	Credits	MSE	IE	Total
2	0	0	2	0	75	25	100

1. Contents of the syllabi as per Appendix A mentioned under unit I to VII shall be for teaching and for the examination to be conducted at the end of the semester i.e. MSE for 75 marks. The examination paper shall be having MCQs, Short answer type questions and an Essay. The IE consisting of 25 marks will be in the form of Report to be submitted based on field work done as per Unit No VIII.
2. The result would be declared in the form of Grades as shown below:
Grade 'O' for score above 75; A:61-75; B:51-60; C:40-50





Officiating Principal
 Rashtrapita Mahatma Gandhi
 Art's & Science College,
 Nagbhid, Dist. Chandrapur

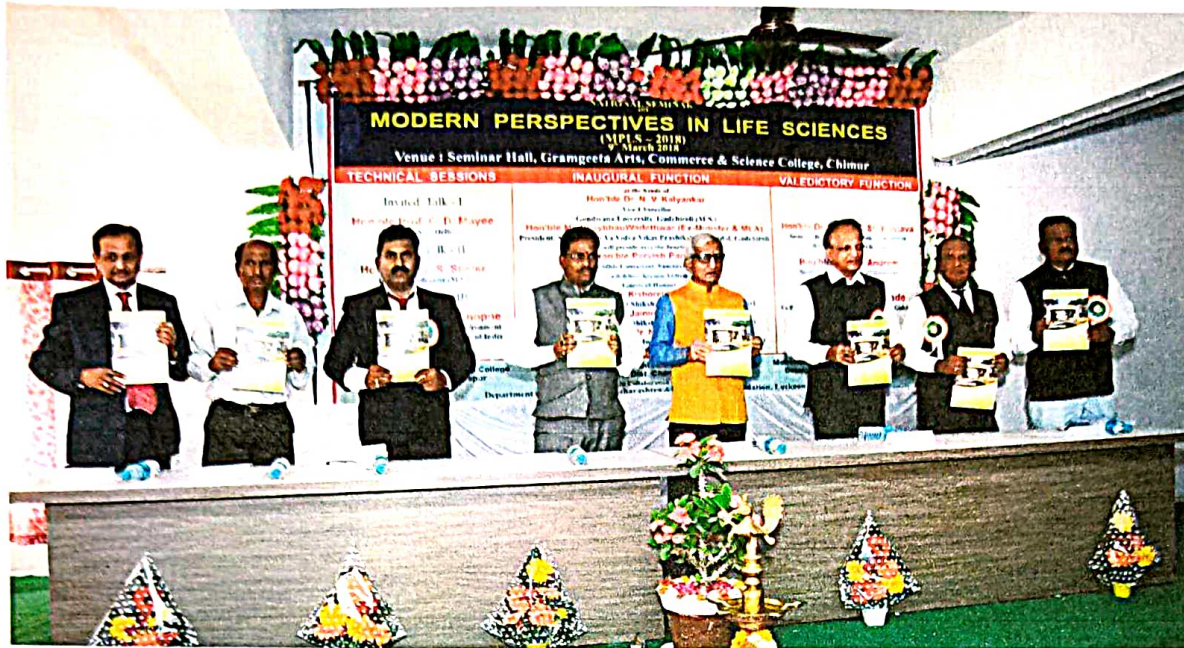
Annexure– C: Fee Structure

A fee of Rs 150/- per student shall be charged and its utilization is as Rs 25/- to be deposited with the Affiliate University and Rs 125/- to the concerned college for providing human resource, supporting infrastructure and the administrative expenses pertinent to the course as approved by the Affiliate University.




Officiating Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

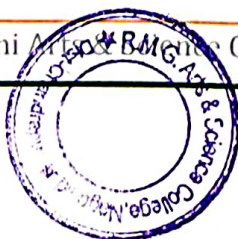
Crosscutting Issues relevant to Professional Ethics



National Seminar on “Modern Perspectives in Life Sciences” (MPLS- 2018) held on 9-10th March, 2018



Organized Vidarbhb Level “Vaidu Samellan & Exhibition of Wild Medicinal Plants & Vegetables” on dated 27th September, 2018



Officially Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

Crosscutting Issues relevant to Professional Ethics



Organized University Level “Judo Competition” on dated 7th October, 2018



Organized National Level Workshop on “Intellectual Property Rights” & “Inauguration of Incubation Centre” on dated 27th September, 2019 at R.M.G. College, Nagbhid



[Signature]
Officiating Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

Crosscutting Issues relevant to Professional Ethics

Organized National Level Exhibition on
“Wild Medicinal Plants & Wild Vegetables Recipe”
on dated 27th July, 2019 at R.M.G. College, Nagbhid



Chief Guest: Hon'ble Sudhirbhau Mungantiwar
(Cabinet Minister of Finance & Planning and Forests departments
in the Government of Maharashtra)



Organization of **University level Seminar competition** for students at college

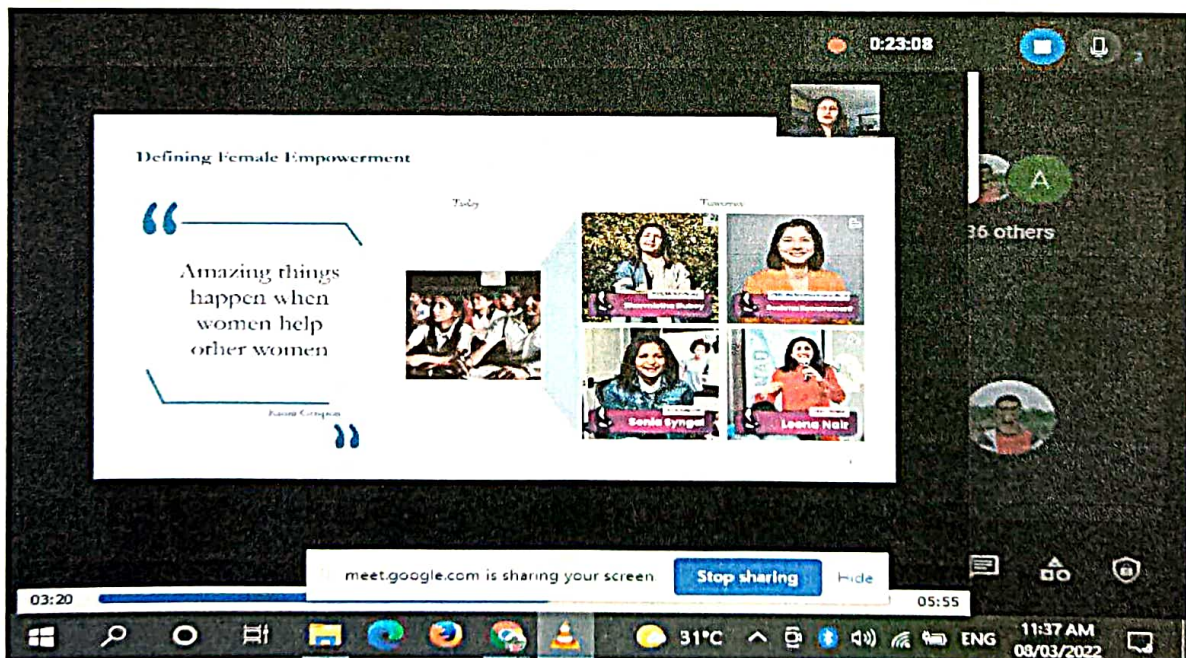


[Signature]
Officiating Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

Crosscutting Issues relevant to Gender



Organization of Webinar on Women Empowerment on the occasion of International Women's Day 2021



Organization of Webinar on Women Empowerment on the occasion of International Women's Day 2022



Crosscutting Issues relevant to Gender



Celebration of **International Women's Day** on 08 March 2020



Organization of Guest Lecture on Women Hygiene



[Signature]
Officiating Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

Crosscutting Issues relevant to Gender



Organization of Webinar on Women Health and Nutrition on **17 September 2019**



Organization of Webinar on Women Health and Nutrition on **17 September 2019**

