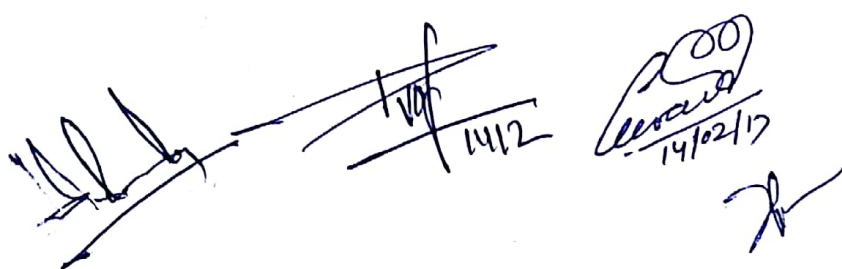


Centre for Environmental Sciences
Agenda for 2nd Board of Studies Meeting
(14.02.2017)

Sl. No.	Agenda	Remarks
1.	Confirmation of previous meeting	
2.	Approval of revised Course structure and Syllabus of Integrated M. Sc. in Environmental Sciences	
3.	Approval of Course structure and Syllabus for proposed M. Sc. in Environmental Sciences	
4.	Approval of Ph.D. Synopsis, Course work Result and Doctoral Committee of Ms. Poulomi Chakravarthy (CUJ/P/2014/PHDEVS/001)	
5.	Approval of Ph.D. Synopsis, Course work Result and Doctoral Committee of Mr. Dipesh Kumar (CUJ/P/2014/PHDEVS/002)	
6.	Approval of Ph.D. Synopsis, Course work Result and Doctoral Committee of Mr. Shashank Sree (CUJ/P/2015/PHDEVS/001)	
7.	Approval of Ph.D. Synopsis, Course work Result and Doctoral Committee of Ms. Priyanka Bharti (CUJ/P/2015/PHDEVS/002)	
8.	Approval of Ph.D. Synopsis, Course work Result and Doctoral Committee of Mr. Rahul Kumar (CUJ/P/2015/PHDEVS/003)	
9.	Approval of Ph.D. Course Work and Research Advisory Committee of Ms. Nisha Kumari (CUJ/P/2016/PHDEVS/001)	
10.	Approval of Ph.D. Course Work and Research Advisory Committee of Ms. Rupam Bharti (CUJ/P/2016/PHDEVS/002)	
11.	Approval of Maternity leave of Ph.D. Scholars (Ms. Smriti Priya)	
12.	List of examiners in Labs and other external experts	



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 (Manoj Kumar)
 Head, Ex-Officio

Centre for Environmental Sciences
Agenda for 2nd Board of Studies Meeting
(14.02.2017)

BOS Agenda 11: Approval of Maternity leave of Ph.D. Scholars (Ms. Smriti Priya

Ms. Smriti Priya (CUJ/P/2013/PHDEVS/001) has applied for Maternity Leave w.e.f. July, 2016 for a period of 240 days and expected to resume Ph.D. course on 1st March, 2017 without fellowship. Agenda is being placed for consideration of her maternity leave and extension of her Ph.D. tenure as per UGC/CUJ norms further excluding the tenure availed during maternity leave.

(Manoj Kumar)
Head, Ex-Officio


Resolution


14/02/17





UP

BOS Agenda: Approval of List of Examiners for Lab/Practical

1. Mr. Santosh Jha
Senior Lecturer,
Dept. of Biotechnology, BIT-Mesra, Ranchi
Email: santoshjha@bitmesra.ac.in
Ph.No., 09430764884
2. Dr. K.D.Pandey
Associate professor,
Dept. of Botany, BHU
Email: kdp_banaras@yahoo.co.in
Ph.No., 09450547298
3. Dr. Virendra Mishra
Assistant Professor,
Dept. of Environmental Sciences,
Central university of Amarkantak, MP
Email: virendra78@gmail.com
Ph.No., 09406298336
4. Dr. Narendra Kumar
Sr. Assistant Professor
Dept. of Environmental Sciences
B B Ambedkar University Raibarely Road, Lucknow – 226025
Ph. No. 09918527968
Email: narendrakumar_lko@yahoo.co.in
5. Dr Arvind Kumar
Assistant Professor
Dept. of Soil Science & Agril. Chemistry
Birma Agril. University, Kanke, Ranchi – 834008
Ph.No.: 9431393494
6. Dr. J P Pandey
Associate Professor
Dept. of Applied Chemistry
Birla Institute of Technology
Mesra, Ranchi – 835215
Ph.No.: 09431382696
7. Mr. Santosh Jha
Senior Lecturer,
Dept. of Biotechnology, BIT-Mesra, Ranchi
Email: santoshjha@bitmesra.ac.in
Ph.No., 09430764884
8. Dr Arvind Kumar
Assistant Professor
Dept. of Soil Science & Agril. Chemistry
Birma Agril. University, Kanke, Ranchi – 834008
Ph.No.: 9431393494
9. Dr. Ramesh Kumar
Associate Professor
Dept of Physics & Agril. Meteorology
Birma Agril. University, Kanke, Ranchi – 834008
Phone: 9431353240
Email: rameshbau@rediffmail.com
10. Dr. Sukalyan Chakraborty
Dept. Env Engg, BIT-Mesra, Ranchi
11. Dr. Naresh Kumar
Dept. Env Engg, BIT-Mesra, Ranchi
12. Dr. A Wadood
Professor
Dept of Physics & Agril. Meteorology
Birma Agril. University, Kanke, Ranchi – 834008

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13. Dr. Kirti Abhishek
Assistant Professor
Dept of Civil Engg & Environmental Sc Engg
BIT Mesra, Ranchi-835215
Email: kavishek@bitmesra.ac.in
Phone: 8294934737, 9470139137
14. Dr. Tanushree Bhattacharya
Assistant Professor
Dept of Civil Engg & Environmental Sc Engg
BIT Mesra, Ranchi-835215
15. Dr. Nishi Srivastav
Assistant Professor
Dept of Applied Physics
BIT Mesra, Ranchi-835215
Email: kavishek@bitmesra.ac.in
Phone: 8294934737, 9470139137
16. Dr. Kamal Barik
North Odisha University, Baripada
17. Dr. Pradhan Partha Sarthi
Cnetral University of South Bihar, Patna
18. Dr. VVSN Pinakapani
Mecon India Ltd.
19. Dr. Sidhartha Singh
CIMFR, Dhanbad
20. Prof. Gopal Pathak
Dept of Civil Engg & Environmental Sc Engg
BIT Mesra, Ranchi-835215



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Centre for Environmental Sciences
Central University of Jharkhand, Brambe, ranchi
Minute of the meeting

First meeting of BOS of Centre for Environmental Science has held in Vice Chancellors Conference Hall in presence of Committee members had given a look on the course structure first.

First Semester & Second Semester:

Basic Maths/Basic Biology should be offered in first semester and Principle of Env. Sc. & Ecology should be renamed as Fundamentals of Env. Sc. & Biology and course should be more biology oriented. And again recommendation is for the modification of 1st sem and 2nd Sem courses. English for communication should be more about writing skill.

Third Semester: Local Field Visit to study the terrestrial and aquatic flora and fauna/Visit to Botanical Garden or Meteorological Station should be Local Field Visit to Natural Ecosystem should be lead by one student guided by one faculty monitor. Earth Science should be modified by content wise. Env. Pollution unit 5 should be renamed as Hazardous waste

All the water analysis should be in one semester

Forth Semester: Summer training is deleted and Environmental Monitoring and Pollution Control Technologies contents should be modified and need major modification. Mining unit should not be here. Monitoring should also be modified. Environmental Microbiology and Biotechnology should be modified and should prepare two separate papers.

Fifth Sem: Forestry & Wildlife management, modification is needed in wildlife part. Environment and Current Issues should be modified as Environmental Issues.

Industrial Pollution and Control (content should be modified).

Industrial Safety and Toxicology should be modified and merged with Occupational health and safety.

Sixth Sem: Hydrology and Water Resource Management should be modified as Water Resource Management.

Dissertation & Seminar (one month) should be modified as Research/Industrial training & report writing (Practice School 1 & Practice School 2)

Seventh Sem: Environmental Laws & Legislation contents should be modified. Ecology should be in beginning of the course

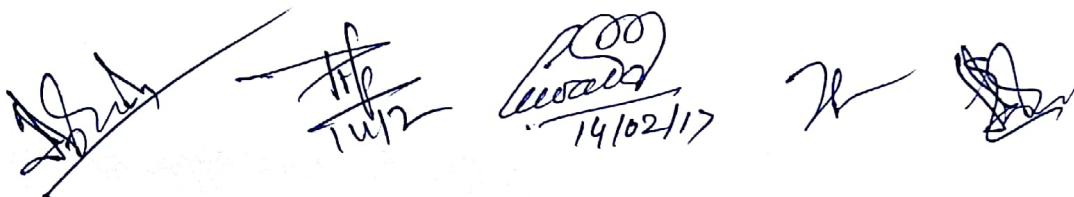
Water Quality Management paper should be renamed as Water Supply and treatment should be contamination and remediation oriented

Eight Sem: Environmental Impact Assessment and Auditing should be separate two papers & content should be extensively modified.

Environmental Application of Microbiology and Biotechnology should be separate two papers.

Environmental Management and Sustainable Development syllabus should be modified.

Tenth Sem: For 16 credit, there should be marks divination of (40% +40%+20% for research, report & presentation respectively) and 4 credit should be for community interaction.


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In Absentia, Prof. KG Saxena, Prof. UC Mohanty and Dr. RK Mall had given suggestions to modify the syllabus to make it more application oriented by introducing courses like Ecological Restoration, Mining and Climate Change, Atmospheric Sciences including Climatology and Meteorology, Oceanography etc. And Syllabus is modified as per their suggestions.

Reshuffling of courses is needed and all the basic courses should be in the first three years and have to take care to avoid any repetition of courses and its contents.

The committee has recommended the entire syllabus with course structure with minor corrections in content of some papers.

The meeting was concluded with vote of thanks by the Chairman.

Meeting was held in presence of the following members-

Prof. Gurdeep Singh, ISM Dhanbad, Deputy Director & HAG

Prof. RP Singh, BBAU, Lucknow

Prof. RC Gupta, Kurukshetra University, Rohtak

Prof. S. Medekar, CAP, CUJ

Dr. L.K. Sharma, CLRM, CUJ

Dr. V. K. Tripathi, CWEM, CUJ

Dr. D.N. Harit, CEVS, CUJ

Dr. Purabi Saikia, CEVS, CUJ

Dr. Bhaskar Singh, CEVS, CUJ

Dr. Tenya Rina, CEVS, CUJ

Mr. Kuldeep Baudh, CEVS, CUJ

Dr. Kavita Parmar, CEVS, CUJ

Dr. Sushil Kr. Shukla, CEVS, CUJ

Dr. Manoj Kumar, Head, CEVS, CUJ (Chairman)

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L.K. Sharma
7/2/14

V.K. Tripathi
7.2.14

D.N. Harit
7.2.14

Purabi Saikia
7.2.14

Bhaskar Singh
07/02/14

Tenya Rina
07/02/14

Kuldeep Baudh
07/02/14

Kavita Parmar
7/2/14

Sushil Kr. Shukla
7/2/14

Manoj Kumar
7.2.14

Centre for Environmental Sciences

BOS Agenda: Approval of Course work and Research Advisory Committee

On the recommendation of the meeting of Centre Research Committee (19.11.2015) Doctoral Research Committee (RAC) of the newly admitted Research Scholars in the Centre has been proposed as per the CUJ Ordinance. Details are mentioned hereunder:

Proposed Doctoral Committee:

1. **Scholar's Name & Reg. No. :** Mr. Shashank Shree, CUJ/P/2015/PHDEVS/001
Tentative Area of Research during Ph.D. : Hydrological modeling.

Proposed Doctoral Committee:

1. Dr. Manoj Kumar, CEVS- Supervisor
 2. Dr. Ajai Singh, CWEM: (Co-Supervisor)
 3. Dr. Bhaskar Singh, CEVS - Member
 4. Dr. Purabi Saikia, CEVS - Member
 5. Dr. Amit Kumar, CLRM –ExternalMember
 6. Head, CEVS – Ex-Officio Chairman
2. **Scholar's Name & Reg. No. :** Ms. Priyanka Bharti CUJ/P/2015/PHDEVS/002
Tentative Area of Research during Ph.D.: Bioremediation of Heavy Metals

Proposed Doctoral Committee

1. Dr. Bhaskar Singh, CEVS- Supervisor
 2. Prof. R.K Dey, CAC - Co-Supervisor
 3. Prof. S. Medhekar, CAP
 4. Dr. Manoj Kumar, CEVS
 5. Dr. P.K Sharma, CLS –External Member
 6. Head, CEVS
3. **Scholar's Name & Reg. No. :** Mr. Rahul Kumar CUJ/P/2015/PHDEVS/003
Tentative Area of Research during Ph.D.: Floristic analysis of tropical deciduous forests of Ranchi, Jharkhand, East India

Proposed Doctoral Committee

1. Dr. Purabi Saikia, CEVS- Supervisor
2. Dr. Manoj Kumar, CEVS - Member
3. Dr. Bhaskar Singh, CEVS - Member
4. Dr. A.C. Panday, CLRM - Member
5. Prof. H.P Singh, CWEM – External Member
6. Head, CEVS – Exofficio Chairman

Pre-Ph.D. Course Work for Ph.D. Students

Semester –I (For all students)

Paper-I: Research Methodology (ENV 921010) (Credit: 3+1+0=4)

Paper-II: Basics Environmental Sciences (ENV 911020) (Credit: 3+1+0=4)

Semester –II

4. **For Mr. Shashank Shree** (CUJ/P/2015/PHD/EVS/001)

Paper –I : Ecology (ENV 921010) (Credit: 3+1+0=4)

Paper – II: Analytical techniques & Instrumentation (ENV 921060) (Credit: 3+1+0=4)

5. **For Ms. Priyanka Bharti** (CUJ/P/2015/PHD/EVS/002)

Paper –I : Ecology (ENV 921010) (Credit: 3+1+0=4)

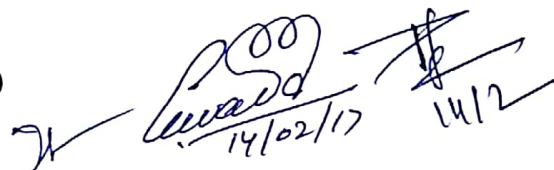
Paper – II: Analytical techniques & Instrumentation (ENV 921060) (Credit: 3+1+0=4)

6. **For Ms. Priyanka Bharti** (CUJ/P/2015/PHD/EVS/002)

Paper –I : Ecology (ENV 921010) (Credit: 3+1+0=4)

Paper – II: Analytical techniques & Instrumentation (ENV 921060) (Credit: 3+1+0=4)

(Manoj Kumar)


14/02/17

Centre for Environmental Sciences

BOS Agenda: Approval of Course work and Research Advisory Committee

On the recommendation of the meeting of Centre Research Committee (25.10.2016) Research Advisory Committee (RAC) of the newly admitted Research Scholars in the Centre has been proposed as per the Ph.D. - REGULATIONS (PROPOSED-DRAFT). Details is mentioned hereunder:

Proposed Doctoral Committee:

1. **Scholar's Name & Reg. No. :** Ms. Nisha Kumari, CUJ/P/2016/PHDEVS/001

Area of Research during Ph.D. : Arbuscular mycorrhizal fungi assisted
Phytorestoration of mining dump site.

Proposed Doctoral Committee:

1. Head, CEVS : Ex-Officio-Chairman
2. Dr. Kuldeep Baudh, CEVS : Proposed Supervisor, Member & Convener
3. Dr. Bhaskar Singh, CEVS : Member
4. Dr. P. K. Sharma, CLS : External Member

2. **Scholar's Name & Reg. No. :** Ms. Rupam Bharti CUJ/P/2016/PHDEVS/002
Area of Research during Ph.D. : Production of biofuel from microalgae

Proposed Doctoral Committee

1. Dr. Manoj Kumar, CEVS : Ex-Officio-Chairman
2. Dr. Bhaskar Singh, CEVS : Supervisor, Member & Convener
3. Dr. Kuldeep Baudh, CEVS : Member
4. Prof. R K Dey, CAC : External Member

Pre-Ph.D. Course Work for Ph.D. Students

Semester –I (For all students)

Paper-I: Research Methodology (ENV 921010) (Credit: 3+1+0=4)

Paper-II: Basics Environmental Sciences (ENV 911020) (Credit: 3+1+0=4)

Semester –II

3. **For Ms. Nisha Kumari** (CUJ/P/2016/PHD/EVS/001)

Paper –I : Environmental Pollution & Management (ENV 921001) (Credit: 3+1+0=4)

Paper – II: Analytical techniques & Instrumentation (ENV 921060) (Credit: 3+1+0=4)

4. **For Ms. Rupam Bharti** (CUJ/P/2016/PHD/EVS/002)

Paper –I : Environmental Pollution & Management (ENV 921001) (Credit: 3+1+0=4)

Paper – II: Analytical techniques & Instrumentation (ENV 921060) (Credit: 3+1+0=4)

(Manoj Kumar)
Head & Associate Professor


14/12/17

LIST OF Ph.D. SCHOLARS OF CENTRE FOR ENVIRONMENTAL SCIENCES AND THEIR DATE OF SYNOPSIS PRESENTATION


Sl. No.	Name	Date and Registration No, if any	Date & Time of Presentation	Topic; if any	Name of the guide	Name of the Doctoral Committee Members <i>DC/RAC</i>
1.	Smirti Priya	6 January 2014; CUJ/P/2013PHD/EVS/001		Characterisation and Effects of aerosol Radiative properties over mining region of Jharkhand.	Dr. Manoj Kumar, CEVS	1. Dr. Manoj Kumar, CEVS 2. Prof. A.C Panday, CLRM 3. Dr. Purabi Saikia, CEVS 4. Dr. Bhaskar Singh, CEVS 5. Head, CEVS
2.	Poulomi Chakravarty	20 August 2014; CUJ/P/2014PHD/EVS/001	24 th Aug'16 2.00 pm	Land surface atmosphere transfer interaction during pre-monsoon thunderstorm activity over Eastern India using remote sensing - GIS techniques and Planetary Boundary Layer Model	Dr. Manoj Kumar, CEVS	1. Dr. Manoj Kumar, CEVS 2. Prof. A.C Panday, CLRM (Co-Supervisor) 3. Dr. Bhaskar Singh, CEVS 4. Dr. Purabi Saikia, CEVS 5. Dr. Ajai Singh, CWEM 6. Head, CEVS
3.	Dipesh Kumar	20 August 2014; CUJ/P/2014PHD/EVS/002	23 rd Aug'16 3.30 pm	Development of biodiesel from non-edible oil using novel heterogeneous catalyst and improvement of its fuel properties	Dr. Bhaskar Singh, CEVS	1. Dr. Bhaskar Singh, CEVS 2. Prof. R.K Dey, CAC 3. Dr. Manoj Kumar, CEVS 4. Dr. Purabi Saikia, CEVS 5. Dr. P.K Sharma, CLS 6. Head, CEVS
4.	Rahul Kumar	18 September 2015, CUJ/P/2015PHD/EVS/003	30 th January'17 12.15pm	Floristic analysis of Sal forests along different watersheds of Ranchi, Jharkhand, East India	Dr. Purabi Saikia, CEVS	1. Dr. Purabi Saikia, CEVS 2. Dr. Manoj Kumar, CEVS 3. Dr. Bhaskar Singh, CEVS 4. Dr. A.C. Panday, CLRM

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						5. Prof. H.P Singh, CWEM 6. Head, CEVS
5.	Priyanka Bharti	18 September 2015 CUJ/P/2015PHD/EVS/002	31 st January'17 12.30 pm	Development of biodiesel from non edible feedbacks using nano catalysts	Dr. Bhaskar Singh, CEVS	1. Dr. Bhaskar Singh, CEVS 2. Prof. R.K Dey, CAC (Co-Supervisor) 3. Prof. S. Medhekar, CAP 4. Dr. Manoj Kumar, CEVS 5. Dr. P.K Sharma, CLS 6. Head, CEVS
6.	Shashank Shree	16 September 2015; CUJ/P/2015PHD/EVS/001	31 st January'17 3.00 pm	Hydrological Modelling of land surface processes over Subarnrekha river basin, Jharkhand, India	Dr. Manoj Kumar, CEVS	1. Dr. Manoj Kumar, CEVS 2. Dr. Ajai Singh, CWEM: (Co-Supervisor) 3. Dr. Bhaskar Singh, CEVS 4. Dr. Purabi Saikia, CEVS 5. Dr. Amit Kumar, CLRM 6. Head, CEVS

(Manoj Kumar)
Head, Ex-officio


14/02/17


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CENTRE FOR ENVIRONMENTAL SCIENCES
Proposal for 2 years M.Sc. in Environmental Sciences

Semester I

Code	Paper	Credit (L+T+P)
ENV 111010	Ecology and Ecosystem	3+1+0
ENV 111020	Environmental Pollution and Monitoring	3+1+0
ENV 111030	Environmental Management and Sustainable Development	3+1+0
ENV 111040	Environmental Chemistry	3+1+0
ENV 111050	Hydrology & Water Resource Management	3+1+0
ENV 112060	Ecology Lab	0+0+2
ENV 112070	Environmental Chemistry Lab	0+0+2
Total Credit: 24		

Semester II

ENV 121010	Science of the Climate (C1)	3+1+0
ENV 121020	Environmental Microbiology and Biotechnology (C2)	3+1+0
ENV 121030	Soil Science (C3)	3+1+0
ENV 121040	Remote Sensing and GIS (C4)	3+1+0
ENV 121050	Instrumentation and Analytical Techniques (E1)	3+1+0
ENV 121060	Climate Change and Current Issues (E2)	3+1+0
ENV 121070	Forestry and Wildlife Management (E3)	3+1+0
ENV 121080	Remote Sensing & GIS Lab	0+0+2
ENV 122090	Environmental Microbiology and Biotechnology Lab	0+0+2
Total Credit: 24		

Semester III

ENV 211010	Environmental Impact Assessment and Audit (C1)	3+1+0
ENV 211020	Environmental Toxicology and Industrial Safety (C2)	3+1+0
ENV 211030	Statistics, Research Methodology and Environmental Modeling (EMS)-C3	3+1+0
ENV 211040	Biodiversity Conservation (E1)	3+1+0
ENV 211050	Natural Resource Management (E2)	3+1+0
ENV 211060	Environmental Law and Legislation (E3)	3+1+0
ENV 211070	Restoration Ecology (E4)	3+1+0
ENV 211080	Pollution Control Technologies (E5)	3+1+0
ENV 211090	Toxicology Lab	0+0+2
Total Credit: 22		

Semester IV

ENV 221010	Dissertation	0+0+16
ENV 221020	Seminar	0+0+4
Total Credit: 20		

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Centre for Environmental Sciences
Syllabus of Five Years Integrated M. Sc. in
Environmental Sciences

Semester I

Sl. No.	Paper	Code	Credit (L+T+P)
1.	Basic Maths	MAT 111010	3+1+0
2.	Introductory Physics I	PHY 110020	3+0+0
3.	Principle of Chemistry I	CHM 110030	3+0+0
4.	Principles of Environmental Science and Ecology	ENV 111041	3+0+0
5.	Fundamentals of Computer and C Programming	COM 110050	2+0+2
6.	Environmental Studies	EVS 110060	3+0+0
7.	Ecology Lab	ENV 112070	0+0+2
8.	Introductory Physics I Lab	PHY 112080	0+0+2
9.	Principles of Chemistry I Lab	CHM 112090	0+0+2
Total Credit			26

Semester II

Sl. No.	Paper	Code	Credit (L+T+P)
1.	Statistics	STA 121010	3+1+0
2.	Introductory Physics II	PHY 120020	3+1+0
3.	Principle of Chemistry II	CHM 120030	3+1+0
4.	English for Communication	ENG 120040	3+0+1
5.	Environmental Chemistry	ENV 121050	3+1+0
6.	Environmental Chemistry Lab	ENV 122100	0+0+2
7.	Introductory Physics II Lab	PHY 122110	0+0+2
8.	Principles of Chemistry II Lab	CHM 122120	0+0+2
Total Credit			26

Semester III

Sl. No.	Paper	Code	Credit (L+T+P)
1.	Environmental Biology	ENV 211011	3+1+0
2.	Environmental Physics	ENV 211021	3+1+0
3.	Environmental Earth Science	ENV 211031	3+1+0
4.	Environmental Pollution	ENV 211040	3+1+0
5.	Disaster Management	LRM 210100	3+1+0
6.	Environmental Pollution and Earth Science Lab	ENV 212050	0+0+2
7.	Environmental Biology Lab	ENV 212060	0+0+2
8.	Local Field Visit to study Natural Ecosystems	ENV 213070	0+0+2
Total Credit			26

Semester IV

Sl. No.	Paper	Code	Credit (L+T+P)
1.	Fundamentals of Soil Sciences	ENV 221011	3+1+0
2.	Environmental Microbiology and Biotechnology	ENV 221021	3+1+0
3.	Natural Resources and Management	ENV 221030	3+1+0
4.	Environmental Monitoring and Pollution Control Technologies	ENV 221040	3+1+0
5.	Environmental Microbiology and Biotechnology Lab	ENV 222050	0+0+2
6.	Soil Science Lab	ENV 222060	0+0+2
Total Credit			20

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Semester V (Electives) (Maximum four from own Centre + at least one from outside)

Sl. No.	Paper	Code	Credit (L+T+P)
1.	Environmental Issues (E1)	ENV 315010	3+1+0
2.	Biodiversity (E2)	ENV 315020	3+1+0
3.	Aerosol and Environment (E3)	ENV 315030	3+1+0
4.	Forestry and Wildlife Management (E4)	ENV 315041	3+1+0
5.	Energy Scenario and Environmental Resources (E5)	ENV 315050	3+1+0
6.	Industrial Pollution and Control (E6)	ENV 315060	3+1+0
7.	Industrial Safety and Toxicology (E7)	ENV 315071	3+1+0
Total Credit			16+04=20

Semester VI

Sl. No.	Paper	Code	Credit (L+T+P)
1.	Instrumentation and Analytical Techniques	ENV 321011	3+1+0
2.	Environmental Agriculture Meteorology	ENV 321020	3+1+0
3.	Municipal Solid and Hazardous Waste Management	ENV 321030	3+1+0
4.	Water Resource Management	ENV 321040	3+1+0
5.	Agro-Meteorology and Analytical Methods Lab	ENV 322050	0+0+2
6.	Research/Industrial training & report Writing (One Month)	ENV 323060	0+0+2
Total Credit			20

Semester VII

Sl. No.	Paper	Code	Credit (L+T+P)
1.	Environmental Law & Auditing/ Environmental Law & Legislature	ENV 411010	3+1+0
2.	Ecology	ENV 411020	3+1+0
3.	Environmental Management and Sustainable Development	ENV 411030	3+1+0
4.	Water Supply and Treatment	ENV 411040	3+1+0
5.	Ecology & Biodiversity Lab	ENV 412050	0+0+2
6.	Water Supply and Treatment Lab	ENV 412060	0+0+2
7.	Visit to Water Treatment Plants/Sewage Treatment Plants	ENV 413070	0+0+2
Total Credit			22

Semester VIII

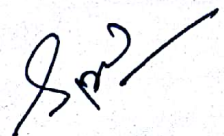
Sl. No.	Paper	Code	Credit (L+T+P)
1.	Environmental Application of Microbiology and Biotechnology	ENV 421010	3+1+0
2.	Science of the Climate	ENV 421020	3+1+0
3.	Environmental Impact Assessment and Management	ENV 421031	3+1+0
4.	Basics of Remote Sensing	ENV 421040	3+1+0
5.	Remote Sensing and GIS Lab	ENV 422050	0+0+2
6.	Applied Microbiology and Biotechnology Lab	ENV 422060	0+0+2
Total Credit			20

Semester IX (Any three electives)

Sl. No.	Paper	Code	Credit (L+T+P)
1.	Environmental Economics and Economics of Pollution Control	ENV 511010	3+1+0
2.	Environmental Modeling and Statistics	ENV 511020	3+1+0
3.	Restoration Ecology (E1)	ENV 515030	3+1+0
4.	Mining impacts on Environment (E2)	ENV 515040	3+1+0
5.	Climate Change, Clean Technology and Zero Pollution (E3)	ENV 515050	3+1+0
6.	Atmospheric Diffusion and Air Pollution Modelling (E4)	ENV 515060	3+1+0
Total Credit			08+12=20

Semester X

Sl. No.	Paper	Code	Credit (L+T+P)
1.	Synopsis	ENV 521010	0+0+2
2.	Mid Term Evaluation	ENV 521020	0+0+2
3.	Dissertation	ENV 521030	0+0+12
4.	Seminar	ENV 521040	0+0+4
			20





झारखण्ड केन्द्रीय विश्वविद्यालय
Central University of Jharkhand
Centre for Environmental Sciences

Minutes of the meeting of Board of Studies, Centre for Environmental Sciences dated 14th February, 2017

A meeting of Board of Studies (BoS), Centre for Environmental Sciences (CEVS) was held to discuss the syllabus of both 5 years integrated M. Sc. course and 2 years (proposed) M. Sc. course in Environmental Sciences, Ph.D. Programmes, and other academic issues including External experts for Ph.D. and practical examination. In the meeting following members were present.

1. Prof. P.K. Mishra, Head, DCET, IIT-BHU (External Expert)
2. Prof. A. Wadood, Head, DAPM, BAU (External Expert)
3. Prof. R. K. Dey, Dean SNS & Head CAC and CNT, Member
4. Prof. S. Medhekar, Head, CAP, Member
5. Prof. A.C. Pandey, Head, CLRM, Member
6. Dr. Ajai Singh, Head, CWEM, Member
7. Dr. B. Singh, Assistant Professor, CEVS, Member
8. Dr. M. Kumar, Head, CEVS, Chairman
9. Dr. Purabi Saikia, Assistant Professor, CEVS, Invitee
10. Dr. S.K. Shukla, Assistant Professor (Temporary), CEVS, Invitee
11. Dr. K. Parmar, SERB-YS, CEVS, Invitee

Looking into the requirement of the centre, the committee has recommended and unanimously resolved that:

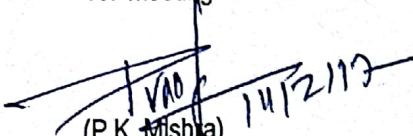
1. Comments of Prof. B. K. Tiwari (send through email) were discussed and suggested to incorporate his comments in the syllabus (Attached as annexure III).
2. The committee recommended modifying the syllabus of 2 years M. Sc., Semester I should be basic compulsory courses
3. Semester II and III should be partly compulsory courses and partly elective courses
4. Electives should be expertise wise like climatology, environmental pollution control, ecology and biodiversity etc. and 04 Electives (02 for each semester II and III) from each specialization
5. Compulsory courses: Environment & Ecology, Environmental Pollution Monitoring, Environment Microbiology and Biotechnology, Instrumentation and Analytical Techniques, Environment Impact Assessment, Environmental Chemistry, Environmental Laws and Legislation, Environmental Modelling and Statistics, Environmental Toxicology and Safety, Forestry and wildlife management
6. Electives for Ecology and Biodiversity: Forestry and wildlife management, Biodiversity Conservation, Restoration Ecology, Carbon Sequestration and Agro-management
7. Electives for Climatology: Aerosol and Environment, Environmental Agriculture meteorology, Land Surface processes and micro meteorology, Fundamental of Remote Sensing and GIS
8. Electives for Environmental Pollution Control: Water and Waste water treatment, Solid Waste Management, Air pollution monitoring and control, Renewable energy Resources
9. Compulsory courses for Semester I: Basics of meteorology and climatology, Ecology and Ecosystem, Environmental Pollution Monitoring, Environmental Chemistry, Instrumentation and Analytical Techniques; Ecology Lab & Field visit and Environmental Chemistry Lab
10. Compulsory courses for Semester II: Environmental Microbiology and Biotechnology, Environmental Geology, Environmental Toxicology and Industrial Safety, Toxicology Lab, Environmental Microbiology and Biotechnology Lab (Electives: Forestry and wildlife management, Biodiversity Conservation, Aerosol and Environment, Environmental Agriculture meteorology, Water and Waste water treatment, Renewable energy Resources)
11. Compulsory courses for Semester III: Environmental Laws and Legislation, Environment Impact Assessment and Auditing, Environmental Modelling and Statistics, Synopsis preparation for Dissertation (04 credits) (Electives: Restoration Ecology, Carbon Sequestration and Agro-management, Air pollution monitoring and control, Solid Waste Management)
12. Semester IV: Dissertation (Mid- term evaluation, Dissertation and Presentation)
13. Committee also approved other agendas mentioned in Annexure I

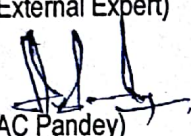
14/02/2017



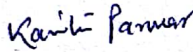
झारखण्ड केन्द्रीय विश्वविद्यालय
Central University of Jharkhand
Centre for Environmental Sciences

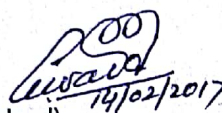
14. Minor changes may be done as per the feasibility of resources and will be intimated to the esteemed members for their suggestion and incorporation
15. Details of the syllabus is attached as Annexure II
16. Meeting has been concluded with the vote of thanks by the chairman.

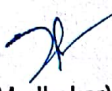

(P.K. Mishra)
Head, DCET, IIT-BHU
(External Expert)



(AC Pandey)
Head, CLRM


(B. Singh)
Assistant Professor, CEVS


(Kavita Parmar)
SERB-YS, CEVS

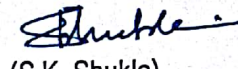

(A. Wadood)
Head, DAPM, BAU
(External Expert)



(S. Medhekar)
Head, CAP


(P. Saikia)
Assistant Professor, CEVS

(R. K. Dey)
Dean SNS & Head CAC and CNT

(Ajai Singh)
Head, CWEM


(S.K. Shukla)
Assistant Professor (T), CEVS


(M. Kumar)
Head, CEVS, Chairman



झारखण्ड केन्द्रीय विश्वविद्यालय
Central University of Jharkhand
Centre for Environmental Sciences

Minutes of the meeting of Board of Studies, Centre for Environmental Sciences dated 19th March, 2018

A meeting of Board of Studies (BoS), Centre for Environmental Sciences (CEVS) was held to discuss the Ph.D. related matters, Synopsis of Ph.D. Student, admission of Ph.D. students and M.Sc. students, and Course structure of Ph.D. and M.Sc. students, Panel of examiners for Ph.D. students (Thesis submission) in Environmental Sciences. Following members were present in the meeting:

1. Prof. Manoj Kumar, Head, CEVS, Chairman
2. Prof. P.K. Mishra, Head, DCET, IIT-BHU (External Expert)
3. Prof. A. Wadood, Head, DAPM, BAU (External Expert)
4. Prof. R. K. Dey, Dean SNS & Head CAC and CNT, Member
5. Prof. S. Medhekar, Head, CAP, Member
6. Prof. H.P. Singh, Dean, SNRM
7. Dr. Ajai Singh, Head, CWEM, Member
8. Dr. Bhaskar Singh, Assistant Professor, CEVS, Member
9. Dr. Kuldeep Baudh, Assistant Professor, CEVS, Member
10. Dr. Nirmali Bardolai, CEVS, Invitee
11. Dr. S.K. Shukla, Assistant Professor (Temporary), CEVS, Invitee
12. Dr. K. Parmar, SERB-YS, CEVS, Invitee
13. Dr. Sanjeev Kumar, Assistant Professor (Temporary), CEVS, Invitee

Following members could not attend the meeting due to their pre-scheduled commitments:

1. Prof. B. K Tiwary, NEHU, Shilong (External Expert)
2. Prof. A.C. Pandey, Head, CLRM, Member

At the outset Prof. Manoj Kumar, Head and Chairman of the Committee welcomed the members specially the members coming from various institutions viz. BHU and BAU along with Dean, SNRM and other esteemed members. He expressed his gratitude to the outside members for sparing their valuable time for this important work. He briefed the functioning of the Centre. The Chairman then briefed the agenda items before the Committee. The proposed agenda items were:

1. Confirmation of the minutes of the last meeting.
2. To consider and approve modification/Constitution of CRC/DRC/RAC
3. To consider and approve Ph.D. related matter:-
 - Tentative Synopsis of Ms. Rupam Bharti
 - Admission of Ph.D. students and M.Sc. students
 - Course structure of Ph.D. students
 - Panel of examiners for Ph.D. thesis evaluation of:
-Ms. Smriti Priya



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Centre for Environmental Sciences

- Ms. Poulomi Chakravarty
- Mr. Dipesh Kumar
- Mr. Rahul Kumar

4. Course curriculum and syllabus of 2 years M.Sc. as suggested during previous meeting.

Committee considered the agenda items and discussed in details. Looking into the requirement of the centre, the committee has recommended and unanimously resolved that:

1. Committee confirmed the minutes of the previous meeting held on 14th February, 2017.
2. Chairman apprised the Committee regarding inclusion of Dr. Kuldeep Bauddh and Dr. Nirmail Bardoloi (Newly recruited faculty) in the DRC/CRC as Eligible Supervisor for guiding Ph.D. scholars as per UGC norms. Dr Bauddh became eligible Supervisor, which has already been approved by Hon'ble Vice Chancellor on recommendation of the Dean, SNRM. Accordingly, revised DRC/CRC duly approved by the Chairman Academic Council/Vice Chancellor for approval brought in the notice of the members. Members agreed with the approval.
3. Chairman also apprised the Committee regarding approval of new RAC of Ms. Poulumi Chakravarty as Prof. A C Pandey has requested to discharge him from the role of Co-Supervisor. Committee noted the approval and recommended for the approval of Academic Council.
4. Committee noted the synopsis topic of Ms. Rupam Bharti as proposed by the RAC.
5. Committee noted the Ph.D. and M.Sc. admissions taken in CEVS in 2017.
6. Committee noted the constitution of RAC for the newly admitted students in the Ph.D. course w.e.f. August 2017 for Ms. Sweta and Ms. Jyoti Kumari.
7. Course work papers offered to the newly admitted Ph.D. students have also been noted and approved the minutes of the RAC by the Committee.
8. Chairman presented sealed envelope containing RAC minutes of the tentative list of panel of Examiners for the Ph.D. evaluation of Mr. Dipesh Kumar, Mr. Rahul Kumar, Ms. Poulomi Chakravarty, & Ms. Smriti Priya. The committee noted and approved the same with noting that the list may be revised at later stage also as required.
9. The committee recommended modified version of syllabus of 2 years M.Sc. based on the minutes of previous meeting
10. Semester IV dissertation work in the M.Sc. course may be like as: Dissertation and Presentation instead of various assessment stages. Centre may adopt evaluation process on internal basis as recommended in the previous meeting as Semester IV: Dissertation (Mid-term evaluation, Dissertation and Presentation).
11. Details of the syllabus is attached as Annexure II



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12. The suggested corrections in the syllabus of 2 years M.Sc. have been incorporated and approved.
13. Meeting was concluded with the vote of thanks by the chairman.

(P.K. Mishra)
Head, DCET, IIT-BHU
(External Expert)

(H. P. Singh)
Dean, SNRM

(B. Singh) 19.3.18
Asstt. Prof., CEVS & Member

(A. Wadood)
Head, DAPM, BAU
(External Expert)

(S. Medhekar)
Prof. & Head, CAP

(Kuldeep Baudhh) 19.03.18
Asstt. Prof., CEVS & Member

(R. K. Dey)
Prof. & Head CAC

(Ajai Singh)
Head, CWEM

(M. Kumar) 19/3/18
Prof. & Head, CEVS & Chairman



Manoj Kumar <manoj.kumar@cuja.ac.in>

Minutes for approval

4 messages

Manoj Kumar <manoj.kumar@cuja.ac.in>

Tue, Mar 20, 2018 at 10:03 AM

To: "Dr. P K Mishra" <pkmishra.che@iitbhu.ac.in>, abdul wadood <wadoodabdul@rediffmail.com>, Brajesh Tiwari <bktiwari@rediffmail.com>, RKDEY <rkdey@rediffmail.com>, "Dr. S. Medhekar" <smedhekarbit@gmail.com>, hps@cuja.ac.in, Harendra Singh <singh.harendra121@gmail.com>, Arvind Chandra Pandey <arvindchandrap@yahoo.com>, ajai singh <ajai.singh@cuja.ac.in>, bhaskar singh <bhaskarsingh53@gmail.com>, Purabi Saikia <purabi.saikia83@gmail.com>, Kuldeep Baudh <kuldeepenvir0811@gmail.com>, Nirmali Bordoloi <nirmalibordoloi12@gmail.com>

Dear Sir/Madam,

Kindly find attached herewith Minutes of the Meeting of BOS held on 19th March, 2018 in the Centre for Environmental Sciences as discussed in the meeting. You are requested to kindly go through it and provide your valuable inputs, if any and approve it so that the same may be sent to the Academic Council for its approval.

Dr Manoj Kumar

Head

Centre for Environmental Sciences

Dean, School of Education & Incharge, Admission Cell

Central University of Jharkhand

Ratu-Lohardaga Road

Brambe, Ranchi - 835 205

Jharkhand, India

Tel: +919431901969,

 Minutes of BOS_2018_Agenda details.doc
277K

abdul wadood <wadoodabdul@rediffmail.com>

Tue, Mar 20, 2018 at 10:23 AM

To: manoj.kumar@cuja.ac.in

The draft of minutes is as per the discussions and decisions of the BS meeting held on 19.3.18.

It is approved from my side

Sent from RediffmailNG on Android

From: Manoj Kumar <manoj.kumar@cuja.ac.in>

Sent: Tue, 20 Mar 2018 10:03:46

To: "Dr. P K Mishra" <pkmishra.che@iitbhu.ac.in>, abdul wadood <wadoodabdul@rediffmail.com>, Brajesh Tiwari <bktiwari@rediffmail.com>, RKDEY <rkdey@rediffmail.com>, "Dr. S. Medhekar" <smedhekarbit@gmail.com>, hps@cuja.ac.in, Harendra Singh <singh.harendra121@gmail.com>, Arvind Chandra Pandey <arvindchandrap@yahoo.com>, ajai singh <ajai.singh@cuja.ac.in>, bhaskar singh <bhaskarsingh53@gmail.com>, Purabi Saikia <purabi.saikia83@gmail.com>, Kuldeep Baudh <kuldeepenvir0811@gmail.com>, Nirmali Bordoloi <nirmalibordoloi12@gmail.com>

Subject: Minutes for approval

[Quoted text hidden]

Bhaskar Singh <bhaskarsingh53@gmail.com>

Tue, Mar 20, 2018 at 10:25 AM

To: Manoj Kumar <manoj.kumar@cuja.ac.in>

Dear Sir,

There is a correction in the Minutes of the Meeting of BOS.

Erroneously, Ms. Rupam Bharti name has got replaced by Ms. Priyanka Bharti.

I have made the correction and highlighted the same with 'Red color'.

Regards

Bhaskar Singh

With warm Regards

Dr. Bhaskar Singh
Assistant Professor
Centre for Environmental Sciences
Central University of Jharkhand

35 205
Varanasi, India

Email: <bhaskarsingh53@gmail.com>
Phone: +91-8292513945
[Quoted text hidden]

 **Minutes of BOS_2018_Agenda details_Minor correction.doc**
277K

Dr. P K Mishra <pkmishra.che@itbhu.ac.in>
To: Manoj Kumar <manoj.kumar@cuja.ac.in>

Tue, Mar 20, 2018 at 1:57 PM

Dear Sir,

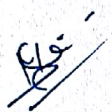
Gone through the minutes and this is approved,

P K Mishra

On Tue, Mar 20, 2018 at 10:03 AM, Manoj Kumar <manoj.kumar@cuja.ac.in> wrote:
[Quoted text hidden]

—
Thanking You with best regards,



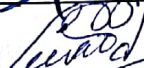
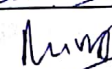
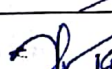

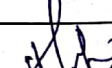
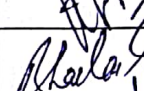
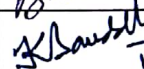
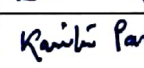
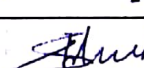
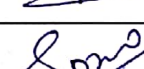
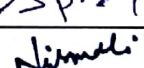
Dr. P.K. Mishra, FIE
Professor & Head
Department of Chemical Engineering & Technology
Coordinator: MCIIE
Indian Institute of Technology (BHU) Varanasi, INDIA
0542-6702036/2035,



CENTRE FOR ENVIRONMENTAL SCIENCES

3rd

3rd Board of Studies meeting has conducted in the Centre for Environmental Sciences on 19th March, 2018. Following members attended the meeting:

Dr. Manoj Kumar, Head	 19.3.18
Prof. P K Mishra, IIT BHU, Varanasi	 19/3/18
Prof. A Wadood, BAU, Ranchi	 19/3/18
Prof. R K Dey, CAC, CUJ	 19.3.18
Prof. S Medhekar, CAP, CUJ	 19.3.18
Prof. H P Singh, Dean, SNRM, CUJ	 19/3/18
Dr Ajai Singh, CWEM, CUJ	
Dr. Bhaskar Singh, CEVS, CUJ	 19.3.18
Dr. Dr Kuldeep Bauddh, CEVS, CUJ	 19.03.18
Dr. Kavita Parmar, CEVS-Invitee	 19.3.18
Dr. Sushil Kr Shukla, CEVS-Invitee	 19.3.18
Dr. Sanjeev Kumar, CEVS-Invitee	 19.03.18
Dr. Nirmai Bordoloi, CEVS-Invitee	 19.3.18



झारखण्ड केन्द्रीय विश्वविद्यालय
Central University of Jharkhand
Centre for Environmental Sciences

Agenda of Board of Studies-19/03/2018 (Monday)

1. Confirmation of the minutes of the last meeting.
2. To consider and approve modification/Constitution of CRC/DRC/RAC
3. To consider and approve Ph.D. related mater:-
 - Tentative Synopsis of Ms. Rupam Bharti
 - Admission of Ph.D. students and M.Sc. students
 - Course structure of Ph.D. student
 - Panel of examiners for Ph.D. thesis evaluation of:
 - Ms. Smriti Priya
 - Ms. Poulomi Chakravarty
 - Mr. Dipesh Kumar
 - Mr. Rahul Kumar
3. Course curriculum and syllabus of 2 years M.Sc. as suggested during previous meeting.