
CHRISTIAN COLLEGE KATTAKADA

AFFILIATED TO THE UNIVERSITY OF KERALA
Thiruvananthapuram, Kerala 695572

STUDENT CENTRIC PROGRAMMES





FOR ENHANCING LEARNING
EXPERIENCES

CRITERION 2. 3. 1.



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SKILL ENRICHMENT PROGRAMMES

Conducted by Dept. of Botany & Research Centre

As part of the Experiential Learning, a variety of student-centered programs are organized at Christian College. Such projects aim at disseminating the knowledge gained from the syllabus on how to use it socially for daily needs. Expanding the practical skills of students, backed by their academic knowledge, is one of the top priorities of these programs. Through such programs, the Christian College becomes an influential force in the area in which it is located and a center for problem-solving ideas that approach new challenges scientifically. During the last five years, important programs conducted by the College to develop the skills of the students, are presented here.

DATA ANALYSIS CLUB

The Analysis Club is an extension program that has been running since 2019 in the Department of Statistics, led by students. The stated purpose of this program is to perform statistical analysis of data according to the orders received. At the request of the client, the club analyzes the given data in detail and provides the result, along with a certificate from the Head of Department. Data is analyzed using modern analytical software such as **R** and **SPSS**. A fixed fee is charged from the client for these works and the proceeds are used for the developmental activities of the department. The club also indirectly plays a role in enhancing the cognitive ability of students and making them aware of the practical value of the course they are studying.

‘PURIFYING DROPS’ – THE STUDENT MADE SANITISER

Unexpectedly, the world was caught up in the Covid 19 pandemic and suddenly sanitizers and handwash were included in the range of much-needed essentials. The price of sanitizers has skyrocketed in the market with the sharp increase in the spread of Covid. It is in this context that the students of Chemistry Department of Christian College Kattakada have come forward to produce high quality sanitizers at low cost. The sanitizer, manufactured under

the name "Purifying Drops", were distributed by the students to various departments and administrative block of the college. On the first day, with the free distribution of small bottles in public places and small establishments, the demand for low-cost sanitizers made by students, increased. The local administrative body in Kattakada approached the college for this and as per their order, the students manufactured and supplied the sanitizer. The department currently distributes bottles every day for the day-to-day needs of the college.



KNOW YOUR PLANT – PLANT IDENTIFICATION CLUB

Know Your Plant is a Plant Identification Wing led by second year PG Botany students at Christian College. The purpose of the program is to identify plants authentically for research fellows from other institutions, as part of a different of research studies, both large and small. The specimens, which the students identify, are verified by the head of the department and after confirmation, a certificate is issued. This specimen is then given an authentic voucher number for further reference, and the deposited department Herbarium.



AUSPICIOUS - COMMERCE FEST



Auspicious is the annual Commerce Fest organized by the Commerce Department. As part of this, extensive student-led food fests and other marketing fairs are held. Student handicrafts and food items are sold at the fair. *Auspicious* comprises various food items and

stalls. This fest exposes the students to meet the practical challenges in business. It also makes the students to inculcate self confidence among them and to have proactive approach. The most importance purpose of organising this commerce fest was to encourage students to become entrepreneur and to be goal oriented in all aspects. It also gives an insight for students to question how things works and work towards finding out solutions to problems.

Respected Sir/Madam,

We the Dept.of Commerce, Christian College Kattakada decided to conduct Com-Fest, 'Auspicious 2k18' and commerce club inauguration followed by seminar. The success of the programme depends up on your participation. While you are going with our stalls you will get birds eye view of our departmental activities.

Hoping your presence and support.

Bency Johnson (Head of the department) Aby R L (Co-ordinator)

Prof.L S Paulraj (Principal)

Thursday **22 nd MARCH** **22 nd MARCH**


Inauguration : 10 30 am
Prayer : Students
Welcome : Aby R L(Asst. Prof.)
Inauguration and keynote address : Prof. L.S Paulraj (Principal)
Special Address : Bency Johnson (HOD)
Felicitation : Viyola J R (Asst. Prof.)
Vote of Thanks : Nishad N.K. (Asst. Prof.)

STALLS

OLX Market
Dress stall
Book Stall
Fancy Store
Electricals
General Items etc.

food fest

- Kappa & curry
- Payasam
- Bakery items
- Pickles
- Cool Drinks
- Sharja
- Ice cream
- Sambharam
- Fruitsalad
- Sarbath etc




CLUB ACTIVITIES

Christian College Kattakada

ECO CLUB

In order to ensure a clean and green environment within the institute an Eco-Club is functioning in our college. Eco club creates an awareness to ascertain a healthy atmosphere within the institute. Students are empowered to participate and take up evocative ecological activities. Students can influence their parents and public communities aware about the environmental behaviour through this forum. Also engage in providing environmental education by adopting various environment friendly approaches for conservation and preservation of environment.

Objectives of the Eco Club are:

- To create an awareness about the ecological degradation and the need for eco system conservation
- Inspire the students for plantation of trees at the college campus.
- Sensitize the students to minimize the use of plastic bags, to ensure the region a Plastic Free Zone and not to throw them in public places
- Proper methods of preservation of water by minimizing the use of water.
- To preserve natural resources and to prevent pollution
- To establish herbal gardening in the college campus
- To create awareness on environmental issues among the public.

ACTIVITY REPORT OF ECO CLUB DURING THE ACADEMIC YEAR 2015-2016

During the academic year 2015-2016, Eco club functioning in Christian college, Kattakada organized several activities. Dr. Jiji Joseph was the convenor of the Eco club. The other faculty members of this club were Dr. Lubaina A S and Smt. Sheena T V The club had a membership of 65 students. Following activities were organized on behalf of this club.

Use of plastics inside the campus is banned

Members of the eco club working hard to change their campus a Plastic Free Zone. For this use of plastic bags inside the campus is completely banned.

Ozone Day

In association with the ozone day celebrations a one-day seminar organised by the P G Department of Botany on the topic 'Thirty years of healing the ozone together' on 16-9-2015. Dr. Rubin José A. S, Assistant Professor, Department of Botany, FMN college, Kollam, Dr. C. A. Lal, Assistant Professor, School of Distance education, University of Kerala and Dr. T.R. Vinod, Research Director, Centre for Environment and Development, Trivandrum were the chief resource persons. A paper presentation competition was also conducted as part of the seminar. A special talk on 'Aquatic Toxicology' organized by the Department of Zoology, on 03.03.2016. Dr. Aruna Devi. C., Assistant Professor, Dept. of Zoology, University College, Trivandrum was the resource person.

ACTIVITY REPORT OF ECO CLUB DURING THE ACADEMIC YEAR 2016-2017

Eco club functioning at the Christian college, Kattakada organized many programs during the academic year 2016-2017. Dr. Jiji Joseph was the convenor, Dr. Lubaina A S and Smt. Sheena T V were the other faculty members of this club. The club had a membership of 60 students. The activities organized on behalf of this club during this year were Environment Day, Water analysis of Amachal Panchayat and an awareness program on 'Plastic Pollution.

Environment Day

Organised by the PG Department of Botany under the sponsorship of Kerala State Council for Science Technology and Environment on 16.6.2016. The theme was "Go Wild for life, zero tolerance for the illegal wild life trade". Dr. T.S. Swapna, Principal Scientific Officer Kerala State Biodiversity Board, TVPM & Dr. Asha V.G., Assistant Professor & Head, NSS

College Nilamel were the resource persons. An intercollegiate quiz competition regarding the current environmental issues was also conducted on the same day.

Water analysis

P G Department of Chemistry organised a 'quantitative and qualitative analysis of Field Water' in Amachal Panchayat with the help of P G students during this academic year

Awareness program

Department of History organised an awareness program on 'Plastic Pollution and the Protection of Environment' on 17.3.2017. Dr. Lubaina, Assistant Professor in Botany, Christian College, Kattakada was the resource person.

ACTIVITY REPORT OF ECO CLUB DURING THE ACADEMIC YEAR 2017-2018

Eco club of Christian college, Kattakada organized several green initiatives. during the academic year 2014-2015. Dr. Lubaina A S was the convenor of the Eco club and Dr. Pradeesh as a faculty member. The club had a membership of 65 students. In order to make the student's environment conscious, the following green activities were organized during this academic year such as Workshop on "Water Quality Analysis" and some field activities.

Water Quality Analysis

In association with Poovachal Panchayat and CWRDM, Calicut, the P G Department of Botany organized a workshop on "Water quality analysis" on 26.10.2017 for the public as well as for our students. Dr. C. Madhavan, Scientist, CWRDM, Calicut was the chief resource person.

Field activities

The students of this club are also exposed to various field activities such as visit to natural ecosystems and biodiversity parks to create enthusiasm regarding issues pertaining to environmental sustainability.

ACTIVITY REPORT OF ECO CLUB DURING THE ACADEMIC YEAR 2018-2019

Eco club functioning at Christian college, Kattakada organized some activities during the academic year 2018-2019. The convenor of the Eco club was Dr. Lubaina A S and Dr. Arun Raj, the other faculty member. The club had a membership of 60 students. Following activities were organized on behalf of this club.

Sensitize the students to minimize the use of plastic utensils

Members of this club were actively involved in sensitizing the students to minimize the use of plastic bags and utensils and tried to ensure their campus a plastic free area. They also engaged to aware the students about the impacts of throwing plastics in public places and to replace single-use plastics with non-plastic alternatives.

Discussion on Conservation and Management of Vellayani Lake in Thiruvananthapuram District

A discussion program on the Conservation and Management of Vellayani Lake in Thiruvananthapuram District was organized by the Eco club members, Christian College, Kattakada on 16th January 2019. The discussion was chaired by the convenor of the club. One of our members was willing to prepare a project for the documentation of plants from that lake.

ACTIVITY REPORT OF ECO CLUB DURING THE ACADEMIC YEAR 2019-2020

In the academic year 2019-2020, Eco club, Christian college, Kattakada undertake some ventures. Dr. Lubaina A S - the convenor and Dr. Arun Raj, member of this club. The club had a membership of 62 students. The programs done during this academic year were enlisted here.

Tree saplings planting program

Tree saplings sponsored by the Forest Office, Thiruvananthapuram were planted in and around the college premises by the members of eco club during October 2019.

Cleanliness program

To spread an environmental awareness among students against environmentally unsound practices like garbage disposal in order to prevent air pollution members of this club organized a cleanliness venture within the college campus.

Visit to a natural ecosystem

Members of this club are also exposed to field visit to natural ecosystem to create enthusiasm regarding the conservation and maintenance of their environment.

QUIZ CLUB

The Quiz club of Christian College Kattakada identifies students who have a flair for quizzing among the students who join every year. Name of students who have won various district and state level quiz competitions during 2015-2020 are enlisted here.

Sl. No	Team	Dept.	place	Level	Organized by	Acad. Year
1	Anusree A.S. Anju L. Jayan	Maths	III	Inter collegiate	All Saint's College, TVPM	2016-17
2	Remya S. Mohan Rajasree	Botany	I	Inter collegiate	University College, TVPM	2016-17
3	Jomon George Joy Yedu M. Krishna	History	II		College of Engineering Thiruvananthapuram	2016-17
4	Lekshmi S. Nair Divya Jayaraj	Chemistry	I	District	KSEB	2016-17
5	Traison T. Simi Krishna	Statistics	I	State	Dept. of Statistics, University of Kerala	2017-18
6	Neethu Das Ancy Raj	Zoology	I	College	Dept. of Zoology, Christian College KTDA	2019-20
7			I	Inter collegiate	Dept. of Statistics Christian College KTDA	2019-20
8	Abhijith A.S. Neeraj S.	Maths	I	Inter collegiate	Dept. of Mathematics VTMNSS College Dhanuvachapuram	2019-20
9	Abhijith A.S. Padma Kumar K.S.	Maths	I	Inter collegiate	Dept. of Mathematics, HHMSPBNSS College, Neeramankara	2019-20

DEBATE FORUM

At Christian College, the debate forum has been actively functioning with an intent to develop the oracy skills of students. The club do different activities to help students with their critical thinking and confident communication. The debate club is led by final year students under the coordination of Dr. Shalini. S.V, Assistant Professor, Department of History. Many socially relevant topics become the topic of the club's monthly debate programme. The panel, comprising Smt. Pratibha K. from the Department of Malayalam and Dr. T.B. Premjithkumar from the Department of History, moderate the heated discussions.



PLANT OF THE DAY

Conducted by Dept. of Botany & Research Centre



PLANT OF THE DAY

P.G. DEPT. OF BOTANY & RESEARCH CENTRE
CHRISTIAN COLLEGE KATTAKADA

Plant of the Day is a daily program conducted by the students of the Department of Botany on their own, under the supervision of PG first year students. On a specially arranged stand with a display board arranged at the main entrance of the science block, they place the twigs of a plant beautifully decorated every day. They provide important information about the plant like scientific name, common names, uses, botanical importance *etc.* along with the logo specially designed for the program. Providing information along with a quote related to nature and plants also fills a positive thought inside those who see the special flower vase of the *Plant of the Day*. Although a very simple program, it helps a lot in creating awareness about the plants and their significance not only in botany students, but also other students, faculty of other departments, and visitors to the institution.

SURVEYS

Conducted by students of Christian College Kattakada

1. ENERGY CONSERVATION – SURVEY

By Dept. of Physics

The Department of Physics organised an energy survey on 'for the people in the tribal settlements of Chonampara, Kithodu in Kottor forestry area in association with Energy Management Centre, Government of Kerala on 24.3.2018. Tribal people along with the vellanandu block member Smt. Mini, Block member Smt. Vahida, Ward member Sri. Ramesan, pre-member Smt. Sreedevi Kattakada Block member Sri. M.R. Byju, along with teaching staffs and students of physics department gathered for the function at Kottoor. By forming few teams of students, the team members visited the houses there. Team members conducted an awareness programme about the energy conservation to the tribal people. The team members conducted an energy audit in the settlement households using specially prepared questionnaires. The main objectives of the survey were to assess the current level operation and practices of electricity and to stimulate the energy saving practice in the village people. LED bulbs were distributed to the tribal people on the same day.



Team members collect information

2. FIELD SURVEY ON THE SURVIVAL RATE OF SEEDLINGS

By Dept. of Statistics

For the Social Forestry Wing of the Kerala Forest Department, UG students of Dept. of statistics conducted a field study on the survival rate of seedling distributed by Neyyattinkara Social forestry range during 2018-19 & 2019-20. The survey, entitled **“Report of the field study on the survival rate of seedling distributed by Neyyattinkara Social forestry range during 2018-19 & 2019-20”** was done under the guidance of Mr. Hari V. G., Assistant Professor, Dept. of statistics Christian College Kattakada. The survey intended to assess the survival percentage of seedlings distributed by Neyyatinkara Social Forestry Department. Students collected samples of seedling distributed from Nurseries in Mandapathinkadavu and Ponnankulam Nursery to the blocks under Neyyattinkara Social Forestry Department. The scope of the project was to improve the efficiency of the programme by understanding the success rate and recommendations from the beneficiaries. The survey reached the conclusion that the Survival rate seedlings in 2019-20 is 56.8% and in 2018-19 it is 50.93. It also found that more than 70 % of the people are satisfied with the quality of seedlings given. The project recommended the involvement of nature enthusiasts and NGOs during different stages of production and distribution of seedling could bring more success to this programme.

3. KUKKIRIPARA BIOLOGICAL PARK – BIODIVERSITY SURVEY

By Dept. of Botany & Zoology

As part of the upliftment of Kukkirippara, a crematorium site in Vellanad Panchayath, into a Biological Park, the Department of Botany and Zoology, Kattakada College, in collaboration with the Kerala state Biodiversity Board and KSCSTE-Jawaharlal Nehru Tropical Botanic Garden and Research Institute (KSCSTE - JNTBGRI), conducted a Biodiversity Survey of the area during the academic year 2019-2020 at the request of the Local

Government. Specimen collection and preliminary data were prepared by selected students in Zoology and PG students in the Department of Botany. The faunal study of the Kukkiripara project was done by the Department of Zoology, Christian College, Kattakada. The work team comprises of 16 members including Dr. Razeena Karim L and Dr Bindulekha D S, Assistant Professors, Department of Zoology, Christian College, Kattakada and 14 students led by Alina S M, I B.Sc. Zoology, Christian College, Kattakada.



Kukkiripara project site



The Kukkiripara was characterized by the diversity of its fauna. Faunal studies were done for two weeks surveyed from 9 am till noon every day. Photographs were taken with mobile camera and with a digital camera. Faunal diversity was primarily identified directly in the field with the help of field guides followed by photography, and rarely by capture. Collection was restricted to those specimens that could not be identified directly. Faunal diversity of the kukkiripara showed that the study area was rich in birds and butterflies followed by plenty of other organisms. Butterflies form the dominant organisms of this ecosystem. Butterflies are excellent biological indicator of habitat quality as well as general environmental health. In a healthier ecosystem there will be an abundance of butterflies. Here we can find more than 100 butterflies belongs to 35 species. The dominant species of butterflies in this area belongs to the Family Nymphalidae. A variety of moth and Larva of the butterflies were the interesting sights of this area. The butterflies prefer particular habitats which is associated with the availability of larval host plants and adult nectar plants.

The rich diversity of butterflies, in this area indicates a varied assemblage of floral species. So, this area may be an excellent site for a butterfly park. Followed by the butterflies about 29 species of birds were identified. Of this 25 were common residents and four were migratory ones. Golden Oriole, Barn swallow, Greenish warbler and Blue tailed bee-eater are the migratory ones. Three different types of bird nest were seen in the area. Different varieties of spiders add another peculiarity of this region. More than 12 species of spiders are identified. Bees, Beetles, flies, Calottes, Millipeds, Monkey, Skink, Ants, Termites, Dragon fly, Dams fly, Grasshopper, Cricket, Praying mantis, Wasps *etc.* make this region rich in biodiversity. Altogether more than 150 species were identified in the region. This rich faunal diversity of this region indicates the need for the preservation of this area. The present list of species is not conclusive and exhaustive and future exploration will be continued to update this checklist.

List of plant species documented

1. *Abrus precatorius*
2. *Abutilon indicum*
3. *Acacia auriculiformis*
4. *Albizia saman*
5. *Alysicarpus vaginalis*
6. *Anacardium occidentale*
7. *Artocarpus altilis*
8. *Artocarpus heterophyllus*
9. *Artocarpus hirsutus*
10. *Asystasia gangetica*
11. *Bambusa bambos*
12. *Biophytum sensitivum*
13. *Blepharis maderaspatensis*
14. *Boerhaavia difusa*
15. *Borassus flabellifer*
16. *Brachiaria ramosa*
17. *Brachiaria reptans*
18. *Breynia retusa*
19. *Calycopteris floribunda*
20. *Canthium coromandelicum*
21. *Carica papaya*
22. *Carissa carandas*
23. *Carissa spinarium*
24. *Caryota urens*
25. *Cassia fistula*
26. *Cassia mimosoides*
27. *Celosia argentea*
28. *Centrosema pubescens*
29. *Cephalandra indica*
30. *Cinnamomum malabattrum*
31. *Cissampelos pareria*
32. *Clerodendrum infortunatum*
33. *Cocos nucifera*
34. *Cuscuta reflexa*
35. *Cyclea peltata*
36. *Cymbopogon citrates*
37. *Cynodon dactylon*
38. *Cyperus rotundus*
39. *Daemia extensa*
40. *Dalbergia horrida*
41. *Desmodium heterocarpon*
42. *Desmodium scorpiurus*
43. *Desmodium triflorum*
44. *Desmodium triquetrum*
45. *Dimeria ornithopoda*
46. *Echinochloa colona*
47. *Emilia sonchifolia*
48. *Eragrostis unioloides*
49. *Eupatorium odoratum*
50. *Euphorbia heterophylla*
51. *Euphorbia hirta*
52. *Evolvulus alsinoides*
53. *Ficus benghalensis*
54. *Fimbristylis miliacea*
55. *Gliricidia sepium*
56. *Helicteres isora*
57. *Hemidesmus indicus*
58. *Hevea brasiliensis*
59. *Hibiscus furcatus*
60. *Hugonia mystax*
61. *Hybanthus ennaespemus*
62. *Ichnocarpus frutescens*
63. *Isachne miliacea*
64. *Ixora coccinea*
65. *Kyllinga monocephala*
66. *Leucas aspera*
67. *Loranthus falcatus*
68. *Macaranga peltata*
69. *Mangifera indica*
70. *Manihot esculenta*
71. *Memecylon randerianum*
72. *Merremia tridentate*
73. *Microstachys chamaelea*
74. *Mikania scandens*
75. *Mimosa pudica*
76. *Morinda tinctoria*
77. *Nymphaea nouchali*
78. *Oldenlandia corymbosa*
79. *Oplismenus burmannii*
80. *Osbeckia aspera*
81. *Oxalis corniculata*
82. *Passiflora foetida*
83. *Pavatta indica*
84. *Pennisetum polystachion*
85. *Phyllanthus amarus*
86. *Piper nigrum*
87. *Psidium guajava*
88. *Pueraria phaseoloides*
89. *Ricinus communis*
90. *Sauropus androgynus*

91. *Scoparia dulcis*
92. *Sida acuta*
93. *Sida rhombifolia*
94. *Smilax zeylanica*
95. *Spermacoce articularis*
96. *Spermacoce ocymoides*
97. *Strychnos nux-vomica*
98. *Synedrella nodiflora*
99. *Tabernaemontana alternifolia*
100. *Tamarindus indica*

101. *Tectona grandis*
102. *Thespesia populnea*
103. *Thunbergia fragrans*
104. *Torenia bicolor*
105. *Tridax procumbens*
106. *Trisetum flavescens*
107. *Vernonia cinerea*
108. *Waltheria indica*
109. *Ziziphus oenoplia*
110. *Zornia diphylla*

SURVEYS CONDUCTED AS PART OF THE FINAL SEMESTER PROJECT

Students in various departments conduct a variety of surveys as part of their final semester project as part of the syllabus. Flora and Fauna diversity surveys of various ecologically important areas are conducted under the Departments of Botany and Zoology. Butterfly survey, bryophyte survey, bird survey *etc.* are done by the students in these departments. History students also conduct surveys on different historically important regions. Economics students conduct surveys addressing a wide range of economic issues. Problems faced by aboriginal people in marketing minor forest products and the socio-economic status of the dairy farmers in the area like topics are often part of these surveys. Students' projects under the Commerce Department include customer satisfaction and employee satisfaction surveys at various institutions in the region.



Dr. VINCENT JOY, N.S
Principal
Christian College
Kattakada