



SILAPATHAR SCIENCE COLLEGE

(PG Section is affiliated to Assam Science and Technology University)

Recognised under Section 2(f) & 12(b) of UGC Act. 1956

Accredited by NAAC with B+ Grade with CGPA 2.70 (1st Cycle)



POSTGRADUATE ADMISSION
PROSPECTUS-2023-2024

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Message from the Desk of Principal

“Education is the most powerful weapon which you can use to change the world.”— Nelson Mandela

Education is the manifestation of love and my most cherished possession. Education drives away ignorance and through illumination it emboldens a man to a righteous thought and action. It empowers a woman and enlarges the horizon of her mind. It energizes a society and enables a man to earn his living with respect and praise.

I have the privilege to welcome you all to this great institution of higher education. Silapathar Science College is trying its best to provide unique and excellent opportunities to the student for the development of their young minds in a secular and conducive atmosphere. In order to accomplish our vision and mission, we are prepared to take as much effort as possible for the betterment of academic scenario in Assam. We believe that education is an effective medium of social transformation. We get encouragement, looking at bright and successful careers of our hundreds of students, which subsequently benefit the society. We feel proud that we are part of such an excellent institute, which is shaping Assam.

Silapathar Science College endowed with progressive futuristic outlook aims continual growth in the quality of all academic activities with a sense of commitment to fully meet the expectations of the students, parents and society at large. Our college cares for the individual development of each and every student. We accord prime importance to the behavioural discipline, moral integrity and cognitive developments of our students. Our teachers strive to teach not only academic programmes but also life skills needed for students’ self-development with highly resourceful faculty. Once again on behalf of entire college family, I welcome you all to this new academic year and are looking forward for a brighter, empowered tomorrow.

With best wishes,

Dr. Ranjit Saikia
Principal,
Silapathar Science College



Our vision

- To provide equitable and accessible scientific as well as traditional knowledge-based education for developing human excellence.

Our Mission

- To impart skill-oriented value-based education in order to imbibe scientific temperament and promote societal accountability and economic sustainability.

Our Objectives

- To promote post graduate education with special emphasis on job-oriented courses and to cater to the needs of present and future generations.
- To bring about educational progress in a rural and tribal areas, as precursor to economic and social upliftment of the deprived groups.
- Strive to develop Silapathar Science College into a dynamic campus that lays strong foundation to knowledge along with healthy socio-cultural values that will enable the students to become good citizens with a commendable global outlook.
- To imbibe the qualities of creativity, equality, spirituality, reasoning and organizing ability among the students.
- To develop skill of analysis and research to make the academic programs relevant to useful to the changing and globalizing times.
- To enrich the students' personality by encouraging their participation in curricular and extracurricular activities.

About Silapathar Science College



Silapathar Science College, a premier seat of higher education offering science education in the Northern Bank of the mighty Brahmaputra, is situated at Silapathar; - the gateway to Likabali, Along, Daporijo of Arunachal Pradesh, one of the picturesque states of the North-East - is a small township and a business hub of the Dhemaji District in Assam. The college was founded in 1996 by a group of zealous and farsighted educationists as well as social activists. While preference is shown to the educational and cultural needs of the tribal community, admission is open to all irrespective of caste, creed and nationality. Initially, the college began with 31 students and 5 staff members at Silapathar College. In 1998 it was moved to its present location where infrastructural expanse began to emerge, through the generosity of a cluster of patrons. The missionary zeal, unflinching endeavor and sacrifice of some prominent local people and whole hearted devotion of some teachers and the management have brought the college to its present state of dignity.

At present, we offer Bachelor of Science (BSc.) programmes (Honours and Non-Honours) at under Dibrugarh University and Master of Science (M.Sc.) programme (Botany and Zoology) under Assam Science & Technology University (ASTU), Guwahati in the year of 2020.



About Assam Science and Technology University



The Assam Science and Technology University was established by Government of Assam under Assam Science & Technology University Act 2009. It aims to provide education and research in the field of science & technology and other professional courses in Assam. ASTU is the premier and only technical university in the North Eastern Region of India. The university is responsible for academic regulation of all undergraduate and post-graduate programs in engineering, and pharmaceutical sciences and a few professional courses in science and management sectors. ASTU also conducts an in-house post-graduate course in Energy Engineering. Since its inception, ASTU has been undertaking high quality teaching and research in frontier areas of science & technology continuously upgrading the syllabi and creating environment for international standard research and emphasizing in bridging the ancient wisdom of the region with modern technology.

Within a very short time of its establishment, ASTU pioneered in establishing a Central Research Hub (CRH), a facility which is not common in Indian universities, and the first of its kind in the North Eastern Region of India. ASTU CRH was initiated in 2018 under the TEQIP-III, MHRD. It aims to create the best possible environment with state-of-the-art facilities for research and innovation to flourish within the region. ASTU will also harness the expertise of leading researchers across the country and the globe to focus on challenge-led, disciplinary and inter-disciplinary research thus strengthening the capability for research along with innovation and knowledge exchange.

About the Course

The Post Graduate programmes of M.Sc. Botany and Zoology affiliated to Assam Science & Technology University, Guwahati has started in the year of 2020. The courses are based on CBCS semester pattern and the course comprises application oriented papers.

Botany includes - Biotechnology and Biofertilizers & Mushroom Cultivation, Orchidology.

Zoology includes - Immunology, Fisheries and Aquaculture

The 4th Semester of Botany course is totally allotted for 6 months major project with the aim to globalize the research and enhance society by advancing knowledge. The students of botany can carry their research work in the nationally reputed research institutes/ universities across the India. 4th Semester Zoology includes the minor project to enhance the research skill of the students.

The first batch 2020- 2022 of 27 students (both Botany and Zoology) have successfully completed the course with 100% result.



**Mode
Regular**

Seat Capacity

Botany - 25

Zoology - 15

Duration of the Course

02 Years / 4 Semesters

Total Credit

Botany - 23+23+24+15=85

Zoology - 21+21+21+21=84

Detailed Course Structure

Botany - https://astu.ac.in/?page_id=17804

Zoology - https://astu.ac.in/?page_id=8570

FEE STRUCTURE OF COURSE

Students have to pay Admission Fee (15000) cum semester (1st) fee 25000/- at the time of admission (Total 40,000/-).

Second Semester - Rs. 25,000/- Third Semester - Rs. 25,000/- Fourth Semester - Rs. 25,000/-

Note: The above fee doesn't include the examination fee and project work. Rs. 5000/- deduction from admission fee will be considered for the students from Silapathar Science College.

Student Scholarship :

A scholarship test will be conducted and the candidate with the 1st rank in test will get a scholarship of Rs.2,000/PM. The students who gets admission can avail the government Scholarship through College.

A student who clears NET/SLET while pursuing M.Sc. he/she will get concession/ deduction of 50% of the semester fee.



Faculty Members

Highly qualified and experienced teachers have been recruited for post graduate departments of Botany and Zoology from various part of India to provide quality education rather than the quantity. The faculty members are experts both theoretically as well as practically in their specialization.

Botany



Dr. Jitu Gogoi, Assistant Professor and Coordinator of PG Departments and Member in PG Board of Studies-ASTU, Guwahati with specialization in Applied Mycology and Plant Pathology completed his M.Sc. degree from Nagpur University, Maharashtra. Ph. D. was bestowed on him by Assam University, Silchar. During his tenure as researcher he reported a new fungal strain namely *Oidium* sp. from *Accia maniguim* and the same was published in an International Journal. He has published 08 research articles, 03 Books and 01 Book Chapter. He is very active person for conservation of wild orchids and documented the indigenous variety of rice from Dhemaji District of Assam.

Dr. M. Mathiyazhagan, Associate Professor to the Department of Botany (PG) completed all his academic carriers in reputed government institutions of Tamil Nadu. He was awarded Ph.D. degree in Bio-Technology (2011) from state government Bharathidasan University, Tamil Nadu. He has 12 years of teaching experiences in Tamil Nadu, Arunachal Pradesh, Odisha and Assam. He has published 10 research articles, 03 Books, 04 Book Chapters with International publishers (Springer & Taylor & Francis). He guided 06 Master thesis and evaluated 17 Ph.D. thesis of various disciplines. He has various administrative positions i.e. HoD, Coordinator, Chairman (Internal Research Council, SSC), Nodal Officer for MoU Operation SSC, Head Academic (Junior Section, SSC) Member in PG Board of Studies-ASTU, Guwahati.



Dr. Zakir Hussain Malik is currently working as an Assistant professor at P.G. Department of Botany, Silapathar Science College, Assam where he carries out his teaching and research in department of Botany. He has 03 years of teaching experience. He completed his bachelor's in Botany from University of Kashmir and his master's in Botany from Barkatullah Vishwavidyalaya Bhopal. He received his Ph.D in Botany in 2019 from the Department of Botany, Annamalai University, Tamil Nadu. His research is situated in the field of plant Physiology and Environmental Biology with a special focus on Phytoremediation of salts and heavy metals from contaminated sites. He has published 12 research articles and 02 book chapters in peer reviewed journals. he has guided 08 PG students to carry out their project work. He has one patent in his name - the device to detect residue on plant.

Zoology

Dr. Shyalima Gogoi, Assistant Professor of Zoology Department (PG) completed her masters in Life sciences (Entomology) from Dibrugarh University. She has done her PHD in Parasitology and Ethnopharmacology (2017) from Department of Zoology, North Eastern Hills University. She has also teaching experience of 2 years worked as an Assistant Professor in Handique Girls College, Guwahati, Assam. She has 7 years of research experience and has published 5 research articles in Springer and Elsevier and two book chapters on international and national books. Her areas of interest are - traditionally used medicinal plants, toxicity assessment, and insect pest diversity. She has been awarded Research Associateship by the Council of Scientific & Industrial Research, New Delhi (2018)





Dr. Pinku Satnami, Assistant Professor, PG Department of Zoology has completed the Bachelor Degree from Tinsukia College under Dibrugarh University (2011), Masters in Microbiology (2013) and Ph.D. from Annamalai University, Tamil Nadu with specialization in Microbiology. The Ph.D. work of the title is Gut Bacterial Diversity Analyses of Heavy Metal Remediating Earthworms viz, *Eisenia fetida* and *Pheretima posthuma* - A Metagenomic Approach. He has three years of teaching experiences in NEET Coaching and various competitive Exams. He published four research papers in reputed journals. He is expertise in microbial sampling & culturing techniques, Microscopic techniques, DNA extraction & PCR amplification.

Ms. Krishma Hazarika, Assistant Professor of PG Department of Zoology qualified B. Sc. (Zoology), Bahona College, Jorhat (2020) and Master in Life Science & Bioinformatics from Assam University, Silchar in the year of 2022 (University Rank Holder). She published a research article in peer reviewed journal in her academic career. Her specialization in teaching is Molecular Genetics.



Dr. Pabitra Sharma, Assistant Professor of Zoology with specialization in Fish Biology and Fishery Science in post-graduation, most of the research works were done in the field of fishery science and hydrobiology. M. Phil. research work was done to investigate the blood parameters of Facultative and Obligate Indian Air Breathing fishes. Blood parameters of four Indian Air Breathing fishes were estimated and this investigation was cited worldwide. Dr. Sharma pursued Ph.D. work in the field of hydrobiology of riverine ecosystem and fish biodiversity of riverine fishes including both upstream and downstream fishes. Extensive field work and survey followed by laboratory works were done along with computerised statistical analysis. He has published 15 research papers in different national and international journals. A total of 23 national seminars, workshops, FDP, webinars were participated. Having an interest in socio-economic, an investigation already completed in the field of socio-economic status of fisher folk from the downstream of Subansiri river.

Dr. Chandana Shyam, Assistant Professor of Zoology completed Post Graduation in Zoology with specialization “Animal Ecology & Wildlife Biology” from Cotton College, Gauhati University, Guwahati. Ph.D. degree was awarded by Department of Zoology, Gauhati University with the title of “Studies on the diversity of squirrel species and ecology of Malayan Giant Squirrel *Ratufa bicolor* (Sparrmann, 1778) in Hollongapar Gibbon Wildlife Sanctuary, Jorhat, Assam”. She worked extensively on the Malayan Giant Squirrel *Ratufa bicolor* and on the different squirrel species in Assam, India. Two research papers were published in reputed Journals and she attended 17 numbers of Seminars, Workshops, FDPs, and Webinars at National and International levels. Having an interest on the ecological aspects of Wildlife Biology, at present research oriented works has been carried on the study of flora and fauna found in the Chala Reserve Forest, Chalapathar.



ELIGIBILITY FOR ADMISSION

- ◆ For admission into P. G. Course in Botany and Zoology a candidate must pass Degree course with Botany and Zoology as major subject with the minimum marks of 50%.
- ◆ The selection process for admission in PG courses is based on the entrance examination conducted by college as per the norms of ASTU.
- ◆ Admission to the College is strictly on merit and subjected to the approval of the Selection Committee.
- ◆ A merit list of the selected candidates will be brought out on time together with a waiting list.
- ◆ Candidates selected must take admission within the schedule time.
- ◆ Candidates who have passed the qualifying examinations earlier than the current year must submit a gap certificate regarding his/her activities during that period from proper authority.

PROCEDURE FOR APPLICATION

Application for admission can be filled online through online admission portal to be activated on scheduled time after official notification and declaration of the Degree Final examination result. The last date of submission of forms and dates of interview/admission for admission will be notified in the website and college notice board. Scanned copies of the following documents are to be submitted during the time of form filled up. (visit website : www.silapatharsciencecollege.au.in)

List of original documents to be produced at the time of admission

- ◆ Mark sheet of particular examination passed.
- ◆ Admit card.
- ◆ Passport size photograph.
- ◆ Registration Card.
- ◆ Pass certificate of last examination.
- ◆ Caste Certificate (if applicable).
- ◆ Migration Certificate (in Original)
- ◆ Conduct certificate/ Character Certificate
- ◆ Gap Certificate (if required)

N.B: However, the original of the same must be produced for verification whenever necessary.

EXAMINATION AND EVALUATION

Examination and Evaluation shall be conducted according to the Regulations of the Assam Science and Technology University, Guwahati. A student shall be declared successful if he/she securing not less than 33% marks.

ASSESSMENT

During the current academic session, the department will conduct the following tests for all classes for assessment:

Internal assessment: There will be internal tests and assignments conducted by the department. Students who fail to fulfil the requirements for the internal semester marks (Internal Tests and Assignments) will not be allowed to appear in the Final Semester Examination.

Departmental Seminars: Seminars are regularly held in the department to expose and enlighten the students about the newly developed fields of research relevant to their studies. It is compulsory that the students appear in all the above tests.

- ◆ Each Sessional examination shall be conducted by the concerned teacher(s) of the course. The setting of question paper, invigilation duty, evaluation of answer scripts for each paper shall be done by the concerned teacher(s) as a part of his/her/their normal duty. The Co-ordinator PG department shall fix the date of the sessional examination of each course complying with the Academic Calendar of the University/College. The students shall have to write the answers in the scripts provided and duly authenticated by the college/institute concerned.
- ◆ After evaluation, the answer scripts should be shown to the students and corrections should be made if necessary. After this, the answer scripts should be collected back from the students.
- ◆ If any student fails to appear in internal assessment, he/she shall not be eligible to appear in the End-Semester examinations of the course(s) concerned. The college/co-ordinator PG department shall notify the same prior to filling up forms for examinations.

ATTENDANCE:

All the Students must attend classes regularly. The minimum attendance should be 85% of the classes held in each subject in an academic year. Students whose attendance falls below 85% but above 65% will be considered as non-collegiate (NC) Students with attendance below 60% will be debarred from appearing in the End-Semester Examination and treating as dis-collegiate (DC)

DISCIPLINE:

All the students are required to maintain strict discipline in and around the college. A student who violates college rules and regulations is liable to disciplinary action, like having their certificates issued as compulsory transfers or even being expelled. Any of the following acts by a student shall be considered as an offence.

- ◆ Ragging is strictly prohibited in the college. According to the judgment of the Honorable Supreme Court, students found to be engaged in such activities will be expelled from the college and legal action will be taken against them.
- ◆ Students who disobey the college's authority and teachers.
- ◆ Any College property should not be damaged, defaced, or devalued.
- ◆ No meeting can be held on the College or Hostel premises or on the College playground without the Principal's permission.
- ◆ Use of unfair means in the College examinations
- ◆ Smoking and chewing of Tobacco, Pan-Masala is strictly prohibited

IDENTITY CARD

An Identity Card will be issued to every student at the time of admission. The card contains a holder along with a passport size recent photograph of the student duly endorsed by the principal. A student must keep the identity card and he/she must produce the same whenever asked for.



FACILITIES:

CENTRAL LIBRARY: Silapathar Science College library was started in 1996 to ensure easy access to its resources. The college has a well-stocked library with a good variety and range of collections which can be accessed by the students. The library has 6000 books, 200 Rare book collection and access to e-books and e- journals through N-List. The library also has computers section where the students can



access the online study materials and browse facilities internet. The library has 15 Nos. of Thesis of our Assistant Professors in its collection in digitised form. The library is partially automated with SOUL 2.0 version of Integrated Library Management Software (ILMS) since 2021.

LABORATORIES: College comprises a variety of science courses. All the laboratories are well equipped with latest equipment and apparatus to facilitate students with the opportunity to undertake experiments with great precision and high accuracy.

Botany Lab:

The Laboratory is furnished with the best equipment to facilitate learning by observing, performing and comprehending the plant kingdom. The Botany department contains laboratory for conducting the practical classes of students. It offers facilities to familiarize students with common experiments and principles necessary for a sound foundation in the plant sciences. there are

diverse instruments, chemicals, and glasswares that are utilized in the practicals. Some of the important instruments include centrifuge machines, spectrophotometer, digital thermometer, microscopes (compound, dissecting, binocular), pH meter, potometer, water baths, etc. Further, there are many specimens and fixed materials of plants kept in the laboratories.



Zoology Lab:

Zoology Lab Provides the students with a suitable environment to develop a detailed understanding of the animal kingdom by exploring the physical, morphological and physiological characteristics of animals. The laboratory presents through its instruments an ideal place for ungraduate students and Postgraduate Students to study the histology of various cells, tissues and organs. Some of the important instruments include Microtome, pH meter, Microscope, digital Balance etc.



Rice Bank: The Rice bank of Silapathar Science college was established on 27th February 2017. The rice bank currently houses 251 distinct types of indigenous rice varieties as well as 30 varieties of HYV that have been conserved.



Orchid House: The Orchid House of Silapathar Science College was established on 13th September 2017. The main objective of the orchid house is conservation and Propagation of Wild orchids. Around 110 species of orchids are being conserved in Ex-situ condition in the Orchid house. A state level NGO named “Orchid Society of Assam” is formed in Silapathar Science College to save the orchid species and their natural habitat in Assam. Head office of this NGO is established in college campus to perform official works in connection to conservation activities of wild orchids.

Botanical Garden: Silapathar Science College has planted a Botanical Garden (Medicinal Plants) that enriches not only the natural beauty of this locality but also becomes highly useful and medicinal for all those suffering from various sorts of ailments. The rural people are given its assistance free of cost as and when they require it for their sound health. The mission of the Botanical Garden is to foster science education to the society and appreciate the importance of Flora.

Biofloc: Biofloc Fish Production Centre of Silapathar Science College was established on 4th February 2022. Vietnam Koi fish and Heteropneustes fossilis are cultured in our Biofloc. Biofloc fish culture offers benefits in improving aquaculture production that could contribute to the achievements of sustainable development goals.



Rukmini Girls' Hostel: Rukmini Girls' Hostel accommodates the female students of Silapathar Science College, only with a capacity of 56 nos of Girls student. The applications for accommodation in the Hostel are generally much more than the number of seats available. The selections are made entirely on the basis of merit and need.

Conference Hall: College has a well-equipped auditorium with a seating capacity of over 80 people. The Hall is spacious, well-ventilated and has well furnished. A regular venue for conferences, workshops and seminars, this auditorium has all the facilities to enhance the learning process and is a vast space that serves the varied requirements of quality education.



Transport Facilities: College's network of transport buses cover all nearby neighborhood, including local communities and townships lying within the radius of 30km. It is designed for the convenience of our students and staff members who are residing outside the campus. This ensures their personal safety, travel reliability and punctuality on the campus.

Departmental Activities

In the Academic years 2020-21 and 2021-2022 Department of Botany and Zoology had organized various Curricular and Co-Curricular Activities to enhance the knowledge of learners in field of Plant Sciences and to gain knowledge and skills in the fundamentals of animal science and understand the complex interactions among various living organisms.

One Day Excursion to Dimow:

One Day Excursion to Dimow was organized by the PG department. Students studied various flora-fauna including economically important plants endemic or rare or exotic plants growing in the area as well as concept of in-situ and ex-situ conservation, importance of Wild life and their conservations in the biological repositories.



Excursion to different states of North East India: Department of Botany and Zoology have organised the educational Tour to different states of North east India. Educational Excursion and Tours play an important role in imparting practical knowledge of any subject. The conceptual base of the subject is certainly developed through theoretical teaching, but when it is supplemented with real-life observations, it makes a life-time impact. Through educational tours, the students get an opportunity to learn through self-exposure to various events.



One day Hands on Training for Orchid Conservation

Department of botany had organised the one day Hands on Training programme for Orchids and its management. Students learned various methods how to conserve the wild orchids of Assam.



Plantation Drive:

A massive tree plantation drive was conducted at College campus to mark the celebration of Azadi Ka Amrit Mahotsav. The programme was initiated under the Chief Minister's Institutional Plantation Programme from July to August.



Horticulture College visit

Students visited a college of Horticulture and forestry Pasighat. The visit helped them to get an experiential learning on Budding, Grafting and Layering and different plant propagating methods.



Glimps of various activities by Silapathar Science College P.G. Department.



DISTINGUISHED VISITORS



Contact details for Admission

Principal (Dr. Ranjit Saikia) - 9954422019/7002818670

Coordinator (Dr. Jitu Gogoi) - 9954338857

Office Assistant (Rajiv Sharma) - 8638590251

Website www.silapatharsciencecollege.ac.in