

KONGUNADU ARTS AND SCIENCE COLLEGE
(Autonomous)
Coimbatore – 641 029



**LAB FACILITIES
FOR
TEACHING - LEARNING**

List of Laboratories

S.No	Name of the Department	No. of Labs	Name of the Labs
1.	Tamil	1	Language Lab
2.	English(Aided)		
3.	English(Unaided)		
4.	Mathematics (Aided)	1	Research Scholar Lab with Computer-1
5.	Mathematics (Unaided)		Maintained by Computer Department
6.	Physics (Aided)	3	UG Lab-1, PG Lab-1, Nanotechnology Lab (Research Lab)-1
7.	Chemistry(Aided)	3	UG Lab-1, Research Lab-1, Instrumentation Lab-1
8.	Chemistry(Unaided)	2	PG Lab-1, Research Lab-1
9.	Zoology (Aided)	6	UG Lab-1, PG Lab - 2, Research Lab-1
			Instrumentation Lab-1, Virtual Lab-1
			Aquarium -1
			Museum- 1
10.	Computer Science (Aided & Unaided)	8	Both UG & PG Labs (7 for Unaided and 1 for Aided)
11.	Biochemistry (Aided)	1	UG Lab-1
12.	Biochemistry (Unaided)	5	PG Lab-1, Research Lab- 2, Project Lab-1, Mush room Unit (For Research Purpose) -1
13.	Biotechnology (Unaided)	8	UG Lab-1, PG Lab-1, Research Lab-1, Instrumentation Lab-1, PTC-1, ATC-1, Microbiology Lab-1, Green House-1
14.	Botany(Aided)	7	UG Lab-1, PG Class cum Lab - 2, Research Lab-1, Instrumentation Lab-1, Microbiology Lab-1, Tissue Culture Lab -1
			Medicinal Garden-1
			Herbarium Center-1
15.	Costume Design and Fashion	3	Pattern Making and Garment Construction Lab-1, Fashion Illustration and Draping Lab- 1, Textile Processing and Textile Testing Lab-1
16.	Common Instrumentation Lab	1	Maintained by College
17.	Green House	1	Maintained by College

Total Number of Laboratories - 50

S.No	Types of Lab	Number
1	UG Science Lab	7
2	PG Science Lab	8
3	Research Lab	16
4	Green House	2
5	Costume Design Lab	3
6	Computer Lab (UG & PG)	8
7	Language Lab	1
8	Instrumentation Lab	5
Total		50

DEPARTMENT OF COSTUME DESIGN AND FASHION

Pattern Making and Garment Construction Lab

The pattern making laboratory is equipped with standard tables for pattern making and cutting. In this lab the student learn how they can independently create patterns for different kinds of garments in common use.

The garment construction laboratory is equipped with the entire range of apparel sewing machinery ranging from the Siruba lock stitch machines to over lock and knitwear flat lock machines. Industrial steam irons, ironing arm boards and cutting machines provide the students of the department an extensive knowledge in achieving high standards of garment finishing techniques.

Fashion Sketching Lab

This lab is primarily designed to bring out the creative talents in the students and provide them with professional guidance to develop them. It deals with effective use of colour, form and material to match the latest trends in fashion.

Textile Testing and Processing Lab

Quality control and testing lab is furnished with all the latest tools for ensuring the quality, which is the need of the global industry. Processing lab is fully equipped to dye and print the fabric which provides the student with the skills of adding value to textile material and develops the sense of colour.

DEPARTMENT OF BIOTECHNOLOGY

The microbiology laboratory in PG and Research Department of Biotechnology is well equipped with instruments such as Laminar air flow chambers, Incubators, Hot air oven, Orbital shakers, Autoclave, Microscopes and Refrigerator. The equipments are routinely used by students and scholars for practicals, projects and research.

The Department has a separate instrumentation room which is thoroughly equipped with latest instruments including Gradient PCR, Real time PCR, Cooling centrifuges, Microfuge, Gel Doc, Bench top bioreactor, Lyophilizer, UV- visible spectrometer, Ice maker, Freezer, AGE apparatus and PAGE apparatus. Students and research scholars working in the field of molecular biology utilize the facilities for their studies.

The plant tissue culture laboratory in the department is well organized with a separate preparatory room, semi-sterile area and sterile culture room. The preparatory room is equipped with Laminar air flow chamber, Fluorescent microscope, Hot air oven, Autoclave, Rotary vacuum evaporator, Clevenger apparatus, Soxhlet apparatus and refrigerator. The sterile culture room is well illuminated and temperature controlled with sufficient racks and has Laminar air flow chamber. Different Orchid species are being maintained and students and scholars use the laboratory for practicals and research.

Animal tissue culture laboratory is present in the department where different cell lines are under continuous maintenance. The laboratory is used by the students during practicals and is also utilized by scholars. The laboratory has an organized setup with wash area, preparatory area and sterile working room. The preparatory room is provided with Incubator, Millipore water unit and Refrigerator. The sterile working room has clean air flow system and UV illumination facility for sterilization purpose and is well equipped with Laminar air flow chamber, CO₂ incubator and inverted microscope.

There is a sterilization and decontamination unit with separate autoclaves which serve the purposes. The unit is provided with basic needs including wash areas and racks. The unit is continuously utilized by both students and scholars and they are made aware about safe disposal of wastes.

The department has a walk-in cold room which is being used for storing fine chemicals, practical kits. The facility is also used by students and scholars for storing reagents and microbial cultures.

DEPARTMENT OF ZOOLOGY

A virtual laboratory is an innovative and valuable tool that will facilitate experimentation for people who lack the resources. The Virtual Labs is an initiative of the Ministry of Human Resource Development (MHRD) under the National Mission on Education through ICT. These virtual laboratories are being developed with the help of modern day computer simulation technologies that provide a real-world feel and environment to enthuse students to learn the internal organ system of animals by dissecting the animals. Despite the availability of the live animals to do the dissection, UGC have stopped the live animal dissection in order to save the Biodiversity. In this context, web based experiments designed for dissecting animals to study internal organ systems will enable students to gain an in-depth understanding of experimental protocols and the position of the organ systems in various animals.

The Animal virtual laboratory at Department of Zoology, Kongunadu Arts and Science College, Coimbatore provides in-depth information about organ systems of Cockroach, Earthworm, Sea star fish, Snail (Pila) (Invertebrates), Frog and Rat (Vertebrates). The virtual laboratory aims to provide students a first-hand experience of dissecting animals and study about the organ systems with the help of Images of actual laboratory experiments. In addition to this students will be provided reading material to enhance their knowledge about the organ systems of the animals. The modules planned for this laboratory will provide a comprehensive overall understanding about planning and performing an experiment using live animals.