

Chowgule Education Society's Parvatibai Chowgule College of Arts and Science

(Autonomous)

Accredited by NAAC with Grade 'A+'
Best Affiliated College-Goa University Silver Jubilee Year Award

ACADEMIC AUDIT REPORT FOR SCIENCE and VOCATIONAL PROGRAMMES

ACADEMIC YEAR: 2023-2024



ACADEMIC AUDIT GUIDELINES FOR THE AUDIT PANEL

(w.e.f. 2021-2022 onwards)

The Academic Audit, like more conventional program reviews, is a peer review process including a self-study and a site visit by peer members from within and outside the institution. Unlike the traditional approach to program evaluation, this process emphasizes self-reflection and self-improvement rather than compliance with predetermined standards. The purpose of an academic audit is to give poise to the departments or programs to weigh up their "educational quality processes" - the key faculty activities required to produce, assure, and regularly improve the quality of teaching and learning. An audit asks how faculty approach educational decision making and how they organize their work, using the resources available to them and working collegially to provide a quality education in the best interests of the discipline and student learning.

1. Audit panel members should verify the academic aspects based on the seven parameters given below:

S.N.	Audit Parameter	Explanation	Required Documentation
1	Curriculum content:	a. The syllabus is covered through adequate number of lectures assigned course/programme.	Soft/hard copy of Internal Academic Audit form, soft/hard copies of attendance sheet/report
		b. Syllabus is revised as per the feedback from stakeholders.	Copy of the Programme Syllabus
2	Teaching- Learning: (Theory/Practical)	a. Teaching-Learning Pedagogies used to achieve the outcomes of the course/programme and also to address the needs of Multiple learners in the concerned course/Programme	Soft/hard copy of sample documents of all Teaching-Learning Methods employed across courses in the programme
		b. Innovation in Teaching- Learning in the concerned course/programme: Any Unique Teaching-learning pedagogies not covered in point 2 (a)	Soft/hard copy of sample documents of all the innovations employed across courses in the programme



		c. Research Publication of Teaching Learning (if any)	Soft/hard copy of publication
3	Outcome of the Course's/Program me:	a. Evaluation methods used to meet the outcomes of the course/programme	Soft/hard copy of Report of Evaluation Methods and Sample Documents of Evaluations employed across courses in the programme
		 b. Innovation in Evaluations Any Unique Evaluation methods not covered in point 3 (a) 	Sample Documents of all the innovations employed across courses in the programme
		c. Research Publication of innovations in Evaluations	Soft/hard copy of publication
4	Seminars and Workshops	Organisation of Guest Talks, Seminars, Workshops for the Curriculum enrichment	Soft/hard copy of the reports
5	Projects Undertaken	Final year Research Projects by students and the outcomes (Publication or Presentation in conference/ seminars)	Soft/hard copy of the project report/s and research papers (if any)
6	Infrastructure (Laboratory)	Use of laboratory, processes followed and the Outcomes of the Use	Physical Verification of the laboratory and the processes followed
7	Feedback Systems	The Collection of Feedback from students	Consolidated Report

- 2. The panel members should evaluate the programme on the basis of the parameters and give valuable inputs in the form provided.
- 3. Action plan based on the external audit report by the Head of the Department to be prepared and submitted after the academic audit.



Bachelor of Science

Sr No.	Department	External Academic Audit Members*	Date of Conduct of External Academic Audit
1	Biotechnology	Prof. Judith Braganca Prof. Sunita Borkar	30.09.2024
2	Botany	Prof. Maria Fonseca Dr. Annie F Gomes	21.09.2024
3	Computer Science	Nilesh Natekar Dr. Solley Thomas	21.09.2024
4	Geology	Dr. Anthony A A A Viegas Dr. Nichole Sequeira	24.09.2024
5	Mathematics	Tarkeshwar Singh M. Kushanandn Dr. Mamta Kulkarni	28.09.2024
6	Physics	Dr Bholanath Pahari Dr Sudhir Cheruklaparath	28.09.2024
7	Zoology	Prof. Angshuman Sarkar Dr. Shanti Dessai	26.09.2024

^{*}The External Academic Audit Members are either the VC nominee or the AC nominee of the respective Board of Studies.

The External Academic Audit was not conducted for the Department of Chemistry (BSc Chemistry) on account of non-availability of external members.

Bachelor of Vocation Programme

Sr No.	Department	External Academic Audit Members*	Date of Conduct of External Academic Audit
1	Software Development (BVoc)	Nilesh Natekar Dr. Solley Thomas	21.09.2024

^{*}The External Academic Audit Members are either the VC nominee or the AC nominee of the respective Board of Studies.

Post Graduate Programme

Sr No.	Department	External Academic Audit Members*	Date of Conduct of External Academic Audit
1.	Information Technology (MSc)	Nilesh Natekar Dr. Solley Thomas	21.09.2024

Page 4 of 8

- *The External Academic Audit Members are either the VC nominee or the AC nominee of the respective Board of Studies.
 - The External Academic Audit was not conducted for the Department of Chemistry (MSc-Analytical Chemistry) on account of non-availability of external members

Post Graduate Diploma Programmes

Sr No.	Department	External Academic Audit Members*	Date of Conduct of External Academic Audit
1	Post Graduate Diploma in Computer Applications (PGDCA)	Nilesh Natekar Dr. Solley Thomas	21.09.2024
2	Post Graduate Diploma in Clinical Genetics and Medical Laboratory Techniques (PGDCG&MLT)	Prof. Angshuman Sarkar Dr. Shanti Dessai	26.09.2024

^{*}The External Academic Audit Members are either the VC nominee or the AC nominee of the respective Board of Studies.

Remarks and Suggestions by the Department Academic Audit Members AY 2022-2023

1. Department of Biotechnology:

No of courses audited	No of Teaching- Learning methods used	No of evaluation methods used	Remark/s by the committee	Suggestions
21	12	08 (theory) & 05 (practical)	w.r.t the curriculum content the subject matter and details are clearly outlined. Exhaustive teaching-learning methods adopted. Courses aligned to OBE. Organised State level Seminar funded by DHE. One state sponsored research project funded by GSWA.	Short term/certificate courses to be conducted. Increase collaborative research.

2. Department of Botany

No of courses audited	No of Teaching- Learning methods used	No of evaluation methods used	Remark/s by the committee	Suggestions	
-----------------------	---	--	---------------------------	-------------	--



24	12	10	Records maintained	Nil
			systematically and verified	
			by the committee.	

3. Department of Chemistry: Auditing was not conducted on account of non availability of external audit members.

No of courses audited	No of Teaching- Learning methods used	No of evaluation methods used	Remark/s by the committee	Suggestions	

4. Department of Computer Science

Programme	No of courses audited	No of Teaching- Learning methods used	No of evaluation methods used	Remark/s by the committee	Suggestions
Computer Science (BSc)	31	08	12	Records maintained	Nil
Post Graduate Diploma in Computer Applications (PGDCA)	05	06	03	Records maintained	Nil
Software Development (BVoc)	36	Not reported	Not reported	Records maintained	Nil
Information Technology (MSc)	04	04	05	Records maintained	Nil

5. Department of Geology

No of courses audited	No of Teaching- Learning methods used	No of evaluation methods used	Remark/s by the committee	Suggestions
28 courses +01 project	@12	@20	The committee pleased with the overall design and execution of the BSc Programme in Geology. The curriculum is comprehensive balancing theoratical concepts with practical experiences, such	Some interdisciplinary courses that connect geology with environment science, chemistry and physics to provide a holistic understanding of earth systems can be provided.
			as laboratory work and field trips which are essential for understanding of Geology. The faculty is	A gemmology certificate course can be arraged for students from backgrounds other than geology.

S Other man geology.

Page 6 of 8

	geoscience related industries,
	Workshops to be arranged for students to generate interest and gain hands-on training.

6. Department of Mathematics

No of courses audited	No of Teaching- Learning methods used	No of evaluation methods used	Remark/s by the committee	Suggestions
26	03	05	Lack of regular faculty in the department.	Organise seminars and hands on workshops, trainings every academic year.
			Use new teaching pedagogies.	Institute/industrial visit outside Goa can be arranged.
	,		Dedicated laboratory required with software's like MATLAB, R etc.	Encourage student's internship to institutes like BITS, IIT, NIT Goa and other institutes.

7. Department of Physics

No of courses audited	No of Teaching- Learning methods used	No of evaluation methods used	Remark/s by the committee	Suggestions
27	06	05	Documents related to teaching schedules, question papers and answer sheet evaluations were verified and found to be in order. In few cases the quality of questions and assignments maybe improved.	

8. Department of Zoology

Programme	No of courses audited	No of Teaching- Learning methods used	No of evaluation methods used	Remark/s by the committee	Suggestions
-----------	-----------------------	---	--	---------------------------	-------------

Department Academic Audit Report_Science_2023-24_PCCAS



BSc Zoology	22	06	08	The department is doing great. The syllabus and curriculum is modern and upto mark. Teachers are focused and trying to improve the pedagogical methods	Nil
Post Graduate Diploma in Clinical Genetics and Medical Laboratory Techniques (PGDCG&MLT)	08	05	05	Programme faculty is fulfilling the criteria to be considered for teaching and learning activities for academic output for the best of their abilities	

Comments by the Academic Dean

- 1. Departments need to conduct certificate courses.
- 2. Review of pedagogical and evaluation modes in some departments.
- 3. Emphasise to be laid on field studies.
- 4. Laboratory space for department of Mathematics

Date: 19.11.2024

Dr. Meghana S Devli Dean, Academics

Alberto Ian Barreto IQAC Coordinator

Prof. (Dr.) Sangeeta Sankhalkar Principal