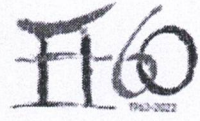




Parvatibai Chowgule College of Arts and Science  
(Autonomous)

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



# ACADEMIC AUDIT REPORT FOR SCIENCE PROGRAMMES

ACADEMIC YEAR: 2022-2023





**ACADEMIC AUDIT GUIDELINES FOR THE AUDIT PANEL**  
(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.





Sr No.	Department	External Academic Audit Members*	Date of Conduct of External Academic Audit
1	Biotechnology	Dr. Meenal Kowshik Dr. Flory Pereira	21 October 2023
2	Botany	Dr Rupali Bhandari	11 October 2023
3	Chemistry	Dr V J Pissurlekar Dr S M Gurav	16 October 2023
4	Computer Science	Dr Kissan Gauns Dessai Dr Sharad Sinha	11 October 2023
5	Geography & Research Centre	Prof. Dr. F M Nadaf	13 October 2023
6	Geology	Prof. Makarand Kale Dr Hrishikesh Samant	16 October 2023
7	Mathematics	Dr. R G Sapre Dr. Kulkarni M N	14 October 2023
8	Physics	Dr Bholanath Pahari Dr Sudhir Cheruklaparath	14 October 2023
9	Zoology	Prof. Dr I K Pai	09 October 2023

- 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:**

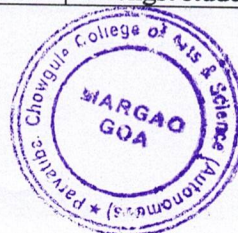
No of courses audited	No of Teaching-Learning methods used	No of evaluation methods used	Remark/s by the committee	Suggestions
23	09	13	Faculty are taking keen interest in developing the curriculum and offering towards a better experience to students. They maybe given the incentive of being upgraded to regular faculty for facilitating their professional growth by applying to state/national agencies for research funding.	Include guest lectures  Animal Cell culture lab should be in a isolated/separate location.

**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
33	06	05	Records maintained systematically and verified by the committee	AC in tissue culture laboratory non-functional

**3. Department of Chemistry**

No of courses audited	No of Teaching-Learning methods used	No of evaluation methods used	Remark/s by the committee	Suggestions
32	03	05	Academic performance upto the mark; however, teachers must spend more time with the students.  Knowledge oriented practicals/projects/innovative methods to be implemented.	Students maybe encouraged to perform individual practicals and projects to develop skills.  Teachers have to put extra efforts to develop interest amongst students.





#### 4. Department of Computer Science

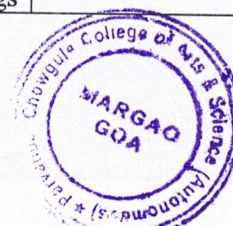
Programme	No of courses audited	No of Teaching-Learning methods used	No of evaluation methods used	Remark/s by the committee	Suggestions
BSc Computer Science	29	Not reported	Not reported	-----	Peer Evaluation method may be considered
BVoc Software Development	18	Not reported	Not reported	-----	Peer Evaluation method may be considered
PGDCA	07	Not reported	Not reported	-----	Peer Evaluation method may be considered
MSc-IT	10	Not reported	Not reported	-----	Peer Evaluation method may be considered

#### 5. Department of Geography

Programme	No of courses audited	No of Teaching-Learning methods used	No of evaluation methods used	Remark/s by the committee	Suggestions
BSc Geography	15	Not reported	Not reported	Nil	Nil
MSc Geoinformatics	11	05	04	Nil	Nil

#### 6. Department of Geology

No of courses audited	No of Teaching-Learning methods used	No of evaluation methods used	Remark/s by the committee	Suggestions
30 + 01 project	12	20	The syllabus of B. Sc. Geology comprises of core, elective, generic electives and skill enhancement courses which is up to date and is as per guidelines with LOCF of UGC. The contents of courses of gets routinely discussed, and the changes/ modifications are discussed in BoS meetings	Emphasis be given to Field work/ Study tours.  Though there may be organisational issues / availability of intake numbers for internship, encourage students to undertake internship in geological organisation and/or





			<p>which gets incorporated in the syllabus.</p> <p>The Course Outcomes were achieved through various modes of assessments.</p> <p>Internship: Good practice</p>	institutions (both government and/ or private).
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### 7. 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	National/international conferences can be thought of	<p>Analysis of results grade wise will be helpful.</p> <p>Mathematics laboratory to be developed</p>

### 8. 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	07	06	Documents verified and found to be well-maintained	<p>Evaluation on assignment mode should be modified. An exam based on assignment maybe given.</p> <p>Consolidated marksheet for project maybe placed.</p> <p>Distribution of work amongst students for project maybe done for fair assessment.</p>

### 9. 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
BSc Zoology	26	10	11	Good academic content and well-maintained records.	Need for better instruments






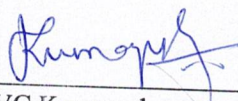
				Teaching faculty well qualified and hard working.	
PGD Clinical Genetics and Medical Laboratory Techniques	08	05	05	Programme is interesting and employable.  Academic contents are good, staff is efficient.	Number of teaching dedicated staff should be increased.  Honorarium for teaching faculty should be enhanced.  Binocular and trinocular microscopes cum photographic attachment should be procured on priority.

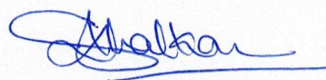
**Comments by the Academic Dean**

1. Departments need to conduct workshops/seminars
2. Review of assessment modes
3. Laboratory upgradation required.
4. Development of Mathematics laboratory.
5. Emphasise to be laid on field studies.
6. Better incentives for deserving Self-financed faculties in order to make them eligible to apply for research funding agencies.

Date: 09/12/2023

  
Dr. Meghana S Devli  
Dean, Academics

  
VC Kumaresh  
IQAC Coordinator

  
Prof. (Dr.) Sangeeta Sankhalkar  
Principal

Date: 13 December 2022

