



Parvatibai Chowgule College of Arts and Science
(Autonomous)

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Best Affiliated College-Goa University Silver Jubilee Year Award



EXTERNAL ACADEMIC AUDIT REPORT

ACADEMIC YEAR

2021-2022

Sr No.	Department	External Academic Audit Members*	Date of Conduct of External Academic Audit
1	Biochemistry	Prof Sandeep Garg Prof. Meenal Kowshik	06 October 2022
2	Biotechnology	Dr. Meenal Kowshik Dr. Flory Pereira	26 August 2022
3	Botany	Prof. Mehtab Bhukari Dr Rupali Bhandari	30 September 022
4	Chemistry	Dr V J Pissurlekar Dr S M Gurav	04 November 2022
5	Computer Science	Dr Kissan Gauns Dessai Dr Sharad Sinha	15 October 2022
6	Geography & Research Centre	Dr Surender Thakurdessai Prof. Dr. F M Nadaf	18 October 2022
7	Geology	Dr Makarand Kale Dr Hrishikesh Samant	30 November 2022
8	Physics	Dr Bholanath Pahari Dr Sudhir Cheruklaparath	26 November 2022
9	Zoology	Prof. Dr I K Pai Prof. Dr Shyama S K	21 October 2022

- The External Academic Audit Members are either the VC nominee or the AC nominee of the respective Board of Studies.

Opinion and Suggestions by the External Academic Audit Members AY 2021-2022

1. Department of Biochemistry:

No of courses audited	No of Teaching-Learning methods used	No of evaluation methods used	Opinion of the committee	Suggestions
22	10	08	<ul style="list-style-type: none"> • Syllabus coverage: V good and updated through regular revisions through BoS meetings. • Syllabus available on college website. • Records in place. • Department has 27 basic equipment's. • Innovative teaching methodologies like posters, assignments, mind maps, group discussions. • Student feedback mechanism in place. 	<ul style="list-style-type: none"> • Seminars, guest lectures from industry and academics to be increased for exposure to current trends by conducting at least one seminar per semester. • Equipment's from other departments and central facility to be made available to students of Biochemistry. • Upgradation of infrastructure

2. Department of Biotechnology:

No of courses audited	No of Teaching-Learning methods used	No of evaluation methods used	Opinion of the committee	Suggestions
22	09	08 (Theory) + 05 (Practical)	<p>Curriculum followed as per course content.</p> <p>Number of lectures allocated were engaged.</p> <p>Various teaching-learning pedagogies used.</p>	<p>Log books to be maintained in laboratories.</p> <p>Equipment like LAF, additional burners may be added to give a better hands-on experience to students and prevent cross contamination between</p>

			<p>Evaluation components designed as per IQAC guidelines.</p> <p>Rubrics available to students well in advance.</p> <p>Adequate higher level thinking questions in question papers.</p> <p>Student project goods and applicable to the field of Biotechnology.</p> <p>Active engagement of students through group discussions, assignments, practicals.</p>	<p>microbial, plant and animal culture system.</p> <p>Since the strength of students is increasing improvement in laboratory space and laboratory infrastructure necessary to give hands-on experience to students.</p> <p>Opportunities to applying to research funding agencies of Government of Goa/India could be enabled if a faculty are hired on longer contractual periods.</p>
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3. Department of Botany

No of courses audited	No of Teaching-Learning methods used	No of evaluation methods used	Opinion of the committee	Suggestions
20	05	05	<p>Records maintained systematically</p> <p>Internal Academic Audit forms been systematically maintained and recorded.</p> <p>Records wrt curriculum content, teaching-learning, outcome-based programmes undertaken.</p>	<p>Seminars, Workshops to be undertaken of National Level involving students and Faculty.</p>

4. Department of Chemistry

No of courses audited	No of Teaching-Learning methods used	No of evaluation methods used	Opinion of the committee	Suggestions
22	02	03	<p>Curriculum completed in time with extra lectures.</p> <p>Make efforts to organise guest lectures/workshops/seminars</p> <p>The Programme is conducted properly however; Practical Assessments to be relooked at</p> <p>Theory question paper choice to be limited to 50%</p> <p>Student feedback form should be revised considering only the teacher's assessment/performance</p>	<p>The faculty to be encouraged for applying Research Project from different funding agencies.</p> <p>Innovative practices, students presentation, experiential learning to be included in the teaching-learning process</p>

5a. Department of Computer Science: BSc Computer Science

No of courses audited	No of Teaching-Learning methods used	No of evaluation methods used	Opinion of the committee	Suggestions
14	11	04	-----	<p>Guest lectures to be encouraged</p> <p>Student Peer Evaluation in group projects may be considered</p>

5b. Department of Computer Science: MSc Information Technology

No of courses audited	No of Teaching-Learning methods used	No of evaluation methods used	Opinion of the committee	Suggestions
16	11	04	-----	Guest lectures are encouraged.

				Student Peer Evaluation in group projects may be considered.
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6a. Department of Geography: BSc Geography

No of courses audited	No of Teaching-Learning methods used	No of evaluation methods used	Opinion of the committee	Suggestions
20			Being Science Programme, the curriculum has balance of theory as well as practical components. Field assignments and submissions are more than adequate	More journal articles can be shared with students as learning resources

6b. Department of Geography: MSc Geoinformatics

No of courses audited	No of Teaching-Learning methods used	No of evaluation methods used	Opinion of the committee	Suggestions
12 (04 Semesters)	07	08	Programme is running well with adequate field and hands-on component. Field exposure which is a vital part of Geography learning Latest software's are used in teaching	More journal articles can be shared with students

7. Department of Geology

No of courses audited	No of Teaching-Learning methods used	No of evaluation methods used	Opinion of the committee	Suggestions
11 (odd semester) + 11 (even semester) + 02 projects	12	20	<p>The syllabus of B. Sc. Geology comprises of core, elective 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 which gets incorporated in the syllabus. After discussing the course content in BoS, the new course e.g. GEL-GEC-3: Historical Geology will be incorporated in syllabus from 2022-23.</p> <p>Both offline traditional method with interactive mode, audio visual presentation and online lectures as well as practical's using Sketchfab, Google classroom (during Pandemic lock down period) are practised together with Group discussions. Availability of lecture notes on Google Classroom as well as e-books will be useful for the students to prepare for the internal as well as end of semester examinations.</p> <p>Continuous evaluation system is best practice to evaluate the understanding and performance of the students.</p> <p>The Course Outcomes were achieved</p>	<p>Emphasis be given to Field work/ Study tours.</p> <p>Though there may be organisational issues / availability of intake numbers for internship, encourage students to undertake internship in geological organisation and/or institutions (both government and/ or private).</p>

		<p>through various modes of assessments.</p> <p>The Department has organised events such as Fossil Day, Mineral Day in which students displayed their collection as well as demonstrated the communication skills to visitors. Students and Faculty Members enthusiastically participated in intercollegiate Seminars and conferences such as GEOSPHERE where they get acquainted with various activities of other departments of Geology and current status of theme of Seminar/Conference.</p> <p>Geology being field based subject, field work is utmost important to understand various attributes of different rock types as they occur nature. The Faculty Members has adequately carried out field work and mine visits for the students and demonstrated how to recognise different rock types in the field, record attitudes of rock types and their interrelationships.</p> <p>It is a good practise that students during their undergraduate studies, undertake internship in government organisations/ institutions such as NIO, NCPOR as well as private organisations, where they get actual work experience and gets acquainted with work</p>	
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		<p>culture. It will be beneficial for students if they undertake internship in Geological organisations rather than marketing/ sales-services.</p> <p>It is beneficial for students to work on projects under the guidance of Faculty Members on Projects related with basic topics of Geology as well as applied aspects of Remote Sensing and GIS. Exposure to RS and GIS in need of the day. Such experience will provide additional qualification for seeking job.</p> <p>The Department has good infrastructural facilities such as three laboratories with basic equipment's, research laboratory, museum with adequate geological samples and comfortable faculty staff room.</p> <p>Feedbacks from the students on various aspects of teaching-learning-evaluation are obtained, analysed and are shown to Faculty Members along with shortcomings if any.</p>	
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8. Department of Physics

No of courses audited	No of Teaching-Learning methods used	No of evaluation methods used	Opinion of the committee	Suggestions
21	07	06	All necessary documents have been checked and found satisfactory.	<p>Feedback by students were found for few courses. To be done for all other courses.</p> <p>All attendance sheets should be signed by respective teachers.</p> <p>Academic Audit Forms of contractual teachers to be collected.</p>

9. Department of Zoology

No of courses audited	No of Teaching-Learning methods used	No of evaluation methods used	Opinion of the committee	Suggestions
24	10	11	Documents well maintained	Keep it up with the latest advancement in the subject.

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.



Dr Meghana S Devli,
Dean, Faculty of Science
Date: 13 December 2022