



GOVERNMENT COLLEGE

RAJAHMUNDRY, ANDHRA PRADESH | **AUTONOMOUS**

ISO - 21001 : 2018, ACCREDITED BY - NAAC - A+

AFFILIATED TO ADIKAVI NANNAYA UNIVERSITY

STANDARD OPERATING PROCEDURE (SOP) FOR CURRICULUM REVISION OF POST GRADUATE PROGRAMS AS PER NEP 2020

1. Introduction

The National Education Policy (NEP) 2020 has introduced transformative changes aimed at enhancing the quality and flexibility in higher education. In the light of this policy, it is essential to revise the Post Graduate (P.G.) curriculum across various departments to align with the policy's vision. This document outlines the systematic approach to be followed for revising the curriculum in our institution, with the primary focus on interdisciplinary learning, flexibility, research orientation, and the development of employable skills.

2. Purpose

The purpose of this SOP is to standardize the procedure for modifying the P.G. curriculum across all the departments. This ensures that the curriculum is in consonance with NEP 2020 guidelines and equips students with knowledge, skills, and research competence necessary for their professional growth.

Key objectives include:

- Introducing interdisciplinary & Trans-disciplinary courses and electives.
- Emphasizing research, innovation, and skill development.
- Incorporating flexibility in course choices through the Academic Bank of Credits (ABC) system.

3. Scope

This SOP applies to all Post Graduate programs offered by the institution, including M.A., M.Sc., M.Com, and other specialized programs. It includes the design and revision of both core and elective courses, practicals and research components across different departments.

4. Roles and Responsibilities

Curriculum Committee:

- A dedicated group of senior faculty members tasked with overseeing the entire curriculum

revision process.

- Review all curriculum drafts and ensure that they align with NEP 2020 standard

Department Heads:

- To lead the curriculum revision process within their respective departments.
- Ensure that faculty participation is effective and aligned with departmental goals

All BoS Committee Members

- To design or modify courses, ensuring they reflect multidisciplinary approaches, focus on modern pedagogical techniques, and integrate skill-based learning.

Administration:

- Ensure that sufficient resources such as faculty recruitment, lab facilities, and research infrastructure are available to support the revised curriculum.

5. Composition of Board of Studies:

1. Head of the Department concerned (Chairman).
2. The entire faculty of each specialization.
3. Two subject experts from outside the Parent University to be nominated by the Academic Council.
4. One expert to be nominated by the Vice-Chancellor from a panel of six recommended by the college principal.
5. One representative from industry/corporate sector/allied area relating to placement.
6. One postgraduate meritorious alumnus to be nominated by the principal.

The Chairman, Board of Studies, may, with the approval of the principal of the college, co-opt:

- (a) Experts from outside the college whenever special courses of studies are to be formulated.
- (b) Other members of staff of the same faculty.

Term : The term of the nominated members shall be three years.

Meetings : The Board of Studies shall meet at least once a year.

Roles and Responsibilities of Board of Studies (BoS) Members

The members of the Board of Studies (BoS) play a vital role in the academic and curricular development of postgraduate programs. Their responsibilities ensure the maintenance of academic standards and the alignment of courses with institutional and regulatory requirements.

1. Chairperson

The Chairperson leads the Board of Studies and ensures its effective functioning.

Key Responsibilities:

- Convene and preside over BoS meetings.
 - Set the agenda in consultation with other members.
 - Oversee the development and revision of curricula, syllabi, and academic policies.
 - Ensure compliance with regulatory bodies such as UGC, AICTE, and NAAC.
 - Approve minutes and decisions made during the meetings.
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- Act as the primary liaison between the BoS and higher academic bodies like the Academic Council

2. Internal Faculty Members

Internal members, typically all faculty from the department, contribute their subject expertise to the BoS

Key Responsibilities:

- Develop and propose curriculum frameworks, syllabi, and teaching methodologies.
- Suggest new courses and modifications based on academic trends and industry demands.
- Evaluate feedback from students and faculty on course effectiveness.
- Ensure alignment of postgraduate programs with institutional objectives and quality standards.
- Propose guidelines for internal assessments and examinations.
- Participate actively in discussions and decision-making during BoS meetings.

3. External Subject Experts

External experts, drawn from academia, industry, or research organizations, provide an objective perspective.

Key Responsibilities:

- Offer recommendations on best practices, emerging trends, and interdisciplinary opportunities.
- Ensure the curriculum remains updated and relevant to global standards.
- Validate the relevance of new courses and major revisions.
- Suggest collaboration opportunities for research, internships, and practical training.
- Provide feedback on postgraduate research standards and outcomes.

4. University Nominee:

Nominees from University ensure compliance with institutional and statutory guidelines.

Key Responsibilities:

- Monitor adherence to regulatory frameworks (UGC, AICTE, etc.).
- Ensure that proposed curricula meet accreditation requirements.

- Facilitate communication between the BoS and the governing bodies.
- Provide administrative insights into resource allocation and policy adherence.

5. Industry Representatives

Industry experts contribute insights into market trends and job opportunities.

Key Responsibilities:

- Recommend skills and competencies needed for postgraduate students to enhance employability.
- Provide inputs on the integration of industry-based projects, case studies, and internships.
- Validate the curriculum's alignment with current industry standards and technologies.

6. Alumni or Student Representatives

Alumni or student representatives provide feedback from the perspective of learners or recent graduates.

Key Responsibilities:

- Highlight the challenges faced by students in the current curriculum.
- Provide suggestions for improving teaching-learning methods and course content.
- Assist in evaluating the effectiveness of the syllabus in meeting career goals.

7. Academic cell

The Academic cell assists the Chairperson in administrative and operational tasks.

Key Responsibilities:

- Prepare and circulate meeting notices, agendas, and minutes.
- Maintain records of all BoS decisions and actions.
- Ensure timely communication of approved curricula and guidelines to stakeholders.
- Track the progress of action points from previous meetings.

By fulfilling these roles and responsibilities, BoS members collectively contribute to the academic excellence and relevance of postgraduate education programs.

8. Key Areas of Curriculum Change

❖ Interdisciplinary Learning:

- Develop elective courses that can be chosen across departments, promoting broader perspectives and holistic understanding.
- Encourage collaboration between departments to offer courses that blend various fields (e.g., Physics with Data Science or Environmental Science with Economics etc).

❖ Credit-based System:

- Incorporate the Academic Bank of Credits (ABC) allowing students to earn and transfer credits between institutions.

- Ensure flexibility in credit accumulation and recognition to provide students the opportunity to take courses from other institutions, enhancing their learning experience.

❖ **Research and Innovation Focus:**

- Increase focus on research methodology and innovation by introducing dedicated research projects, thesis work, and internships as mandatory components.
- Organize regular seminars, workshops, and guest lectures from industry experts and researchers to promote practical knowledge.

❖ **Skill Development:**

- Integrate practical, vocational, and skill-based learning through labs, internships, or industry-linked projects. the curriculum.

❖ **Flexibility and Choice:**

- Ensure that students have a variety of elective courses to choose from, empowering them to tailor their academic journey.
- Introduce open electives that allow students to explore subjects outside their primary discipline.

7. Process for Curriculum Revision

Step 1: Initial Review by Departments

- Each department should review its current curriculum to identify outdated courses, redundant content, or areas for improvement.
- Faculty members are encouraged to propose innovative ideas that align with NEP 2020 principles, such as interdisciplinary learning and research integration.

Step 2: Consultation with Stakeholders

- Organize consultations with faculty members, students, alumni, and industry experts together inputs on the necessary changes.
- Analyze feedback to ensure that the curriculum meets the needs of students, aligns with industry trends, and upholds academic rigor.

Step 3: Drafting the New Curriculum

- Based on the feedback, departments should draft a new curriculum that incorporates modern pedagogical approaches, interdisciplinary elements, and research components.
- Each program should reflect NEP 2020 guidelines, with a clear division of core subjects, electives,

research, and skill-based courses.

- Include detailed descriptions of new courses, with defined learning outcomes and assessment methods.

Step 4: Review and Approval

- Submit the revised curriculum to the Curriculum Committee for review and feedback.
- Once feedback is incorporated, the revised curriculum should be presented to the Academic Council for final approval.

Step 5: Implementation

- After approval, the new curriculum will be implemented in the upcoming academic cycle.
- The administration will coordinate with faculty to ensure they are trained to deliver the revised courses effectively.
- Schedules, timetables, and faculty assignments will be adjusted to reflect the new curriculum structure.

8. Evaluation and Continuous Improvement

- Establish a feedback mechanism to regularly collect input from students, faculty, and external experts on the effectiveness of the revised curriculum.
- Conduct annual or biennial reviews to ensure the curriculum remains relevant to current industry demands and advances in the respective fields.
- Modify the curriculum further based on feedback and emerging trends in academia and industry.

9. Conclusion

In line with NEP 2020, the revised P.G. curriculum will focus on providing a holistic education that combines academic knowledge, research, and practical skills. This ensures that students are prepared for both advanced research opportunities and professional careers. Continuous evaluation and stakeholder involvement will be central to maintaining a dynamic and effective curriculum.

GUIDELINES

The salient features of the adopted curriculum framework are as follows:

1. The following two options to be kept for offering two-year PG programmes (M. A., M. Com and M. Sc.) in the colleges.

A.) First two semesters core courses, third-semester Research Methodology courses, and fourth-semester Research Project.

B.) First three semesters' course papers and fourth semester with Project

2. The Boards of Studies can choose either of the two options or both as per their requirement program wise.
3. The duration of the masters programme for students joining with three year UG Programme will be two years with four semesters, each semester with 90 working days.
4. The duration of the programme for those joining with a 4 year UG Honours/ Honours with Research Degree shall be one year with 2 semesters, each Semester with 90 working days.
5. A student exiting after completing all the courses of the 1st year of programme shall be awarded PG diploma with an option to re-enter the programme within 2 years.
6. A student who has completed 4 years UG Honours Degree is eligible for lateral entry into the 2nd year/3rd semester of the 2-year PG program with either research in 3rd and 4th semesters or with coursework only in 3rd semester and project work in 4th semester.
7. An undergraduate with 4-year UG Honours with Research is eligible for lateral entry only into the 2nd year/3rd semester of the 2-year PG program with Coursework in 3rd semester and Project Work in 4th Semester.
8. The total number of seats sanctioned for a post graduate program shall remain the same, without any increase in the sanctioned strength. However, for the admission of students with 4-year UG Honours and 4-year UG Honours with research, 20% of supernumerary seats shall be sanctioned in semesters 1 and/or 3 for UG Honours and UG Honours with research. Such supernumerary seats created shall be used only for the purpose sanctioned without any deviation. No supernumerary seats shall be created if no suitable candidates are available.
9. While awarding the postgraduate degree for a one-year PG with lateral entry, the provisional certificate and the degree conferred shall clearly mention that the student is awarded a one-year post graduate program after completing a four-year UG Honours program and also the number of credits secured by the students in the 4-year UG program

shall be mentioned.

10. The student has to secure the required number of credits as mentioned in the framework for the respective programmes to obtain PG Diploma at the end of Semester II.
11. While awarding the post graduate degree for a one-year PG re-joined students with one- year PG Diploma after 3 years of UG, the provisional certificate and the degree conferred shall clearly mention that the student is awarded a one-year post graduate program after completing a one-year PG Diploma and also the number of credits secured by the students in the one-year PG Diploma shall be mentioned.
12. The following method of assessment shall be followed for all PG programs in sciences, arts, humanities being offered by the College.
 - The maximum marks for all theory courses shall be 100
 - The maximum marks for all practical courses shall be decided based on number of practical courses offered in the semester.
 - The corresponding BOS members will decide the marks and credits for the courses.
 - The distribution of marks between Summative (which occur at the end of a course or semester) and Formative or internal assessments shall be 60%: 40%.
13. The pass minimum for formative/internal assessment will be 50%. There is internal assessment for practical courses also and the assessment shall be made for 100 marks divided as 50 marks for internal and 50 marks for external. The student has to obtain 40% marks in both internal and external separately.
14. The pass minimum for the summative assessment shall be 40% (i.e., 24 out of 60) in theory courses and 50% in practical courses and project works.
15. The summative assessment will be double fold for ensuring reliability and validity. Assessment shall be made by the internal and external examiners. If there is a deviation of 20% in assessment by the internal and external examiners, third valuation shall be carried out and the best among these three will be considered.
16. It is suggested that one of the core/skill courses in Semester – 1 or Semester -2 may be considered for Open Book Examination.
17. (a) The following model be adopted for Formative/Internal Assessment in theory courses:
 1. First internal examination – Descriptive type for 20 marks
 2. Second internal examination – Multiple choice (20 questions each carries 0.5 marks) for 10 marks

Note: There will be negative marking of 1/8 marks for each wrong answer.

3. 5 marks for assignment
 4. 5 marks for student seminar/Participation in national or international seminar
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18. The IKS course to be monitored and completion of the course to be ensured by the course coordinator of the department (The students may be asked to submit an assignment, which shall be certified by Head of the department).
 19. The teaching hours per week for each theory course for science programs shall be 4 hours and 5 hours for non-science programs with 3 and 4 credits respectively. The work. Loadper week for each practical/field course shall be 3 hours with 2 credits.
 20. The teachers may offer research methodology courses through online mode or the students may be encouraged to complete them through SWAYAM or any MOOCS platforms. The same may be offered through physical/class room teaching. Appropriate decision in this regard may be taken by the respective BOS in consultation with the faculty members of their concerned departments.
 21. The Head of the Department shall allocate a mentor to the students to monitor and track student's progress on Swayam Course/Online courses.
 22. Apart from mandatory online courses, the departments may map and deliver 20% of Skill or Core Courses through online platforms like Swayam or NPTEL. However, this is permitted for 20% of the total courses offered in the programme. For example, if 10 courses are offered in a programme, 2 courses can be taught online.
 23. A list of online courses may be prepared in the respective BOS meeting for all open online trans disciplinary and open online skill development courses, giving a choice to the students to choose one/two courses from that list and to complete them to earn required credits.
 24. Any two courses on Indian knowledge system (IKS) to be introduced in the curriculum(one IKS course each in first two semesters). These courses can be common for all PG courses.

Suggested courses in IKS
 1. Introduction to Indian knowledge system for 1st Semester
 2. Indian intellectual heritage for 2nd semester
 25. The first two semesters will contain 7 theory courses for M.A, M.Sc., M.Com
 - 3 core courses
 - 2 skill courses
 - 1 open online trans disciplinary course
 - 1 course on Indian knowledge system (Auditing only)

26. The Number of Practical courses (2/4/5) per semester - will be decided by the corresponding BOS

27. The open online courses can be opted from SWAYAM or any MOOCS platform. The students may be allowed to take the final test/SA from the same online platform. In case of the online test dates mismatch with semester end exams, the College/Department shall conduct the final exam.

The Project work dissertation submitted by students at the end of 4th Semester to be checked critically to avoid any overlap with any previously published work. The guidelines for the plagiarism check will be according to the UGC guidelines. The plagiarism shall not exceed 30%. The course coordinator shall have

1. choice to select the courses based on need & availability. For online courses the following credit distribution shall be followed

No. of Credits	Duration of Online course
1 Credit	4 weeks
2 Credits	8 weeks
3 Credits	12 weeks
4 Credits	16 Weeks

2. 12 credits will be awarded to the project work. The remaining 8 credits for 4th semester can be obtained by completing skill oriented courses from MOOCS platforms. The teachers can also offer online classes on some subject specific/research oriented skill courses.

3. Award of grades: For all Post Graduate programs (M.A, M.Sc., and M.Com.)

Range of Marks	Grade	Grade point	
$\geq 90 \leq 100$	O	10	Out Standing
$\geq 80 < 90$	A+	9	Excellent
$\geq 70 < 80$	A	8	Very Good
$\geq 60 < 70$	B+	7	Good
$\geq 55 < 60$	B	6	Above Average
$\geq 50 < 55$	C	5	Average
$\geq 40 < 55$	P	4	Pass
< 40	F	0	Fail
	NA		Absent

Note: A candidate will be declared to be passed with distinction only if he/she gets a grade A and above, provided if he/she passes all the courses in regular mode and in single attempt in every semester.

4. Calculation of SGPA (Semester Grade Point Average)

$$SGPA = \frac{\text{Sum of product of grade points and credits of all the concerned courses}}{\text{Sum of credits of all courses in the semester}}$$

$$= \frac{\sum_1^n (\text{grade Point} * \text{Credits})}{\sum_1^n \text{Credits}}$$

Where 'n' is the total number of courses

5. Calculation of CGPA (Cumulative Grade Point Average)

$$CGPA = \frac{\text{Sum of product of grade points and credits of all the concerned courses of all semesters}}{\text{Sum of credits of all courses in all the semester}}$$

$$= \frac{\sum_s \sum_1^n (\text{grade Point} * \text{Credits})}{\sum_s \sum_1^n \text{Credits}}$$

Where "s" is number of semesters and "n" is number of courses in a semester

A candidate has to secure minimum of 4.0 SGPA for a pass in each semester.

Guide lines for framing Syllabus

- Each course/Paper consist of 4 units with appropriately distributed syllabus
- While designing the syllabus the departments need to focus on the topics covered in various competitive exams like CSIR/UGC NET, SET, GATE, etc.
- Skills papers are designed in accordance with opportunities for employment and entrepreneurship
- There shall be choice of 50% in skill papers for first two semesters

CURRICULUM FRAME WORK FOR M.Sc ZOOLOGY 2024-2026 ADMITTED BATCH

Semester	Courses	Theory			Practical		
		Hr	Cr	MM	Hr	Cr	MM
Sem-I	Core-1 Biosystematics and natural resources management	3	3	100	2	1	50
	Core-2 Molecular cell biology	3	3	100	2	1	50
	Core-3 General and comparative physiology	3	3	100	2	1	50
	SEC-1 Tools ,Techniques and research biology	3	3	100	2	1	50
	SEC-2 Metabolic cell function and regulation	3	3	100	2	1	50
	OOTDC-1 SWAYAM/NPTEL		2	50			
	Indian Knowledge System-I	2	-				Audit Course
	End of Sem-I	17	17	550	10	5	250
Sem-II	Core-4 Genetics and evolution	3	3	100	2	1	50
	Core-5 Developmental Biology	3	3	100	2	1	50
	Core-6 Immunology	3	3	100	2	1	50
	SEC-3 Quantitative biology	3	3	100	2	1	50
	SEC-4 Principles of Biotechnology	3	3	100	2	1	50
	OOTDC-2 SWAYAM/NPTEL		2	50			
	Indian Knowledge System-II	2	-				Audit Course
	End of Sem-II	17	17	550	10	5	250
Sem-III	Core-7 Population Ecology	3	3	100	2	1	50
	Core-8 General and comparative endocrinology	3	3	100	2	1	50
	Core-9 Molecular Biology	3	3	100	2	1	50
	SEC-5 Biodiversity and Animal Conservation	3	3	100	2	1	50
	SEC-6 Aquaculture	3	3	100	2	1	50
	End of Sem-III	15	15	500	10	5	250
Sem-IV	Open online skill development courses		8				
	PROJECT WORK					12	200
	End of Sem-IV		8			12	
	Total Hours/Credits	49	57		30	27	

NOTE

- ❖ **SEC** - **Skill Oriented course**
- ❖ **OATDC** - **Open Online Trans Disciplinary Course**
- ❖ **Hr** - **Hours**
- ❖ **Cr** - **Credits**
- ❖ **MM** - **Maximum Mark**

(AUTONOMOUS) RAJAHMUNDRY
ACADEMIC CELL, GOVERNMENT COLLEGE

Proceedings of the Principal, Government College (Autonomous), Rajahmundry
Present: Dr. Ramachandra R.K, M.Sc., Ph.D.

R.C. No. 43/GCRJY /PG-BoS/ 2024-25 dt. 19.11.2024

Sub: Government College (A), Rajamahendravaram- PG Boards of Studies (BoS)- Nomination of Members – Orders issued.

Ref: 1. UGC Guidelines of for Autonomous Colleges-2023.

2. Proc. Of the Vice Chancellor No: ANUR/DAA/Govt. College/Sub. Experts/2024

Order

Principal, College (Autonomous) Rajahmundry is pleased to nominate the following members to PG Board of Studies to frame the syllabus of **Zoology subject** in all the semesters duly following the norms of the UGC regulations for the Autonomous colleges 2023.

SN		Designation
1	Sri K. Babu Lecturer In-charge, Dept of Zoology & Aqua Culture, Government College (A), Rajahmundry	Chairman
2	All faculty members of the department	Members
3	Dr. P. Vijaya Nirmala, Professor in Zoology, Adikavi Nannaya University, Rajamahendravaram	University Nominee
4	Dr. N. Srinivas, In-Charge of the Department, Department of Zoology, Government Degree College, Ramachandrapuram	Subject Expert
5	Dr. M. Naga Prasanna, Lecturer in Zoology Government College for Women (A) Guntur	Subject Expert
6	K. Sarala Principle Scientist CTRI, Rajahmundry	Representative from industry
7	Ms. V. Kalyani Baby	Alumnus

LIST OF QUESTION PAPER SETTERS

S.no	Name of the Faculty	University/College
1	Dr.A.MATTA REDDY	AKNU,RJVM
2	Dr.P.VIJAYA NIRMALA	AKNU,RJVM
3	Dr.K.RAMANESWARI	AKNU,RJVM
4	Dr.K.RAMAKRISHNA	SKSD MAHILA KALASALA,TANUKU
5	Dr.K.R.SHESHAGIRI RAO	GDC WOMENS,GUNTUR
6	Dr.K.USHA RANI	DNR COLLEGE,BHIMAVARAM
7	Dr.P.KIRANKUMAR	GDC,RAMPACHODAVARAM
8	Dr.M.THEJOMOORTHY	GDC,ELESWARAM
9	Dr.N.SRINIVAS	P.R.COLLEGE(A),KAKINADA
10	Dr.MANIKYALA RAO	ANR COLLEGE,GUDIVADA
11	Dr.D.KALYANI	AKNU,RJVM
12	Dr.P.PADMAVATHI	ANU GUNTUR
13	Dr. Ch.THULASI MASTHANAMMA	ASSOCIATE PROFESSOR IN ZOOLOGY GOVT.DEGREE COLLEGE FOR WOMEN GUNTUR
14	M.NAGA PRASANNA	GDC WOMEN GUNTUR

GOVERNMENT COLLEGE (A) RAJAMAHENDRAVARAM

DEPARTMENT OF ZOOLOGY 2024-2026

S.NO	NAME OF THE FACULTY	SIGNATURE
1	Dr.D.SAILAJA	
2	K.DURGA RAO	
3	G.RAVI TEJA	
4	K.SUBHASHINI DEVI	
5	M.VIJAYA SANTHI	
6	N.VARA KUMARI	
7	K.SONIYA	
8	T.S.S.RAGHUVeer	
9	CH.JYOTHI KUMARI	
10	CH.DURGA BHAVANI HEMA	
11	B.NIVIDETHA	
12	M.SUVARNA VALLI	

GOVERNMENT COLLEGE (A) RAJAMAHENDRAVARAM

DEPARTMENT OF ZOOLOGY

P.G BOARD OF STUDIES MEETING CONSOLIDATED REPORT FOR THE YEAR 2024-26

The board of studies meeting of the department of **Zoology** was convened on _____ at
under the chairmanship of **K.Babu** with the following members.

S.NO	NAME	DESIGNATION	Signature
1.	Dr.N.Srinivas In-Charge of the department Department of Zoology Govt.Degree College Ramachandrapuram	SUBJECT EXPERT	
2.	Dr.M.NagaPrassana Lecturer in Zoology Govt. college(A) for women's	SUBJECT EXPERT	
3.	Dr.P.Vijaya Nirmala professor in zoology Adi kavi Nannaya University Rajahmundry	UNIVERSITY NOMINEE	
4.	K.Sarala Principle scientist CTRI Rajahmundry	EXPERT FOR INDUSTRY- CORPORATE SECTOR	
5.	Ms V.Kalyani baby	ALUMNUS	

The following documents are submitted to the Academic coordinator
and controller of Examinations.

1. Resolution of PG Board of studies meeting
2. Syllabus of I&II semesters
3. Model question papers of semesters theory only.
4. List of paper setters/Examiners.

CHAIRMAN

Department of zoology

