

School of Sciences

(Formerly School of Architecture, Science and Technology)

Minutes of the PAC for B.Sc. (Honours in Major and Minor) {2024 Pattern} as per NEP 2020 Meeting held on 30.09.2023

Date: 30th September, 2023

Time: 11.30 am to 01.30 pm

The PAC Meeting of 4 year B.Sc. (Honours in Major and Minor) programmes, (Total 12 programmes) as per NEP2020 guidelines of **School of Sciences** was held offline & online on **Saturday, 30-09-2023 at 11:30 AM** at the school meeting hall. Following members and invitees were present,

01	Dr. Chetana Kamlaskar	(Chairperson) and Member
02	Dr. Sunanda More	Member
03	Dr. Sanjay J. Dhoble	Member
04	Prof. Pallavi Chetan Dixit	Member
05	Dr. Latthe Sanjay Subhash	Member
06	Dr. Chetan B. Patil	Member
07	Dr. Ramesh L. Gardas	Member
08	Dr. Nikam Vasant R.	Member
09	Prof. Bhausaheb S. Desale	Member
10	Dr. J. N. Chaudhari	Member
11	Dr. Prashant. A. Gawande	Member
12	Dr. Mangala Dala Sonawane	Member
13	Dr. Chetan. S. Jawale	Member
14	Dr. Anil Kurhe	Member
15	Dr. Dhananjay Mane	Member
16	Dr. Bharat More	Invitee
17	Ms. Tejaswi Kadam	Invitee
18	Ms. Sweta Kapade	Invitee
19	Mr. Manish Shingare	Invitee
20	Mr. Ghanashyam Patil	Invitee
21	Mr. Rahul Navale	Invitee

Following members were absent for online ZOOM Meeting. However, following PAC members have provided their inputs through E-Mail and What's App.

01	Dr. Ashok V Borhade	Member
----	---------------------	--------

Dr. Chetana Kamlaskar, Chairperson and Member of the PAC (B.Sc. Honours), first welcomed PAC members and introduced the members about the purpose of the meeting. Each present member of the PAC and the invitees introduced themselves. During the meeting following items were discussed.

SN	Details of Items	Resolution
1	Agenda 1: To finalize and approve the proposed programme structure and Credit distribution structure for 4 year B.Sc. (Honours in Major and Minor) programmes. Any one Major from Physics, Chemistry, Mathematics, Botany, Zoology and one Minor (other than major) [Refer Appendix I: List of proposed programmes]	All PAC members unanimously finalised and approved the proposed programme structure and Credit distribution structure for 4 year B.Sc. (Honours in Major and Minor) of Total 12 Programmes* as per NEP 2020, with few suggestions in courses. Any one Major from Physics, Chemistry, Mathematics, Botany, Zoology and one Minor (other than major). *[Refer Appendix I: List of proposed programmes] The PAC members suggested the following in relation to the courses in the Programme Structure: 1. Prof. Dr. Bhausaheb S. Desale proposed that instead of having 'LaTeX' as a major course in Mathematics, it would be better to include a different practical course. This is because LaTeX is a skill-based course. 2. Dr. Javale suggested replacing the current IKS course 'Ancient Biology' of Zoology as a major, with a course called 'Biology in Ayurveda'. Additionally, this course could also be used as an IKS course for Botany as a major.
	Action Taken: Programme structure has been modified accordingly. Refer Appendix II for modified programme structures.	
2	Agenda 2: To finalize and approve the semester 01 and 02 syllabus of the proposed 12 programmes	All PAC members unanimously finalized and approved the semester 01 and 02 syllabus of the proposed 12 programmes, with few suggestions. Each PAC member studied the detailed syllabus of the proposed programs in advance before the meeting and made suggestions regarding the course content, as follows: 1. Dr. V. R. Nikam suggested to include 'Matrix Algebra' in Algebra course for the first semester. Additionally, proposed to rearrange certain topics in the syllabus of the Algebra and Calculus courses to ensure a logical flow of the course content. 2. Dr. J. N. Choudhari suggested to combine the units on Limits and Theorems on limits in the Calculus course. 3. Dr. Chetan Patil suggested incorporating more industry based applied components of Chemistry, such as Polymers. Also, suggested to incorporate more experiments in Chemistry curriculum and to ensure that Learner Support Centres (LSCs) should strictly follow the guidelines for conduction of practical sessions. 4. Prof. Dr. Ramesh L. Gardas shared Vlab links to enrich the lab activities of practical types of courses which includes: • Interactive screen experiment/RSC Education URL: https://edu.rsc.org/resources/collections/screen-experiments • Titration Screen experiment URL: https://virtual.edu.rsc.org/titration/experiment/2 • Experiments Royal Society of Chemistry URL: https://edu.rsc.org/resources/practical/experiments 5. Prof. Pallavi Dixit suggested adding reference book on Modern Physics in PHY 101 course. The syllabus of the 'Electricity and Magnetism' course in Semester 2 (4 credits, Major) seems to be extensive for a first-year level. It may be better to redistribute a portion of the content to another semester, possibly in the Electrodynamics course.

	Action Taken: Syllabus has been modified accordingly and updated syllabus as per the modified programme structure has been sent to you by mail. For Practical courses, VLab links will be incorporated after exploring each experiment. Refer Appendix III for Syllabus for proposed 12 programmes.	
3	Agenda 3: To recommend additional Elective courses (DEC), OE/VSC courses etc.	The PAC members unanimously agreed to recommend additional elective courses which will be offered in phase wise manner as per the industry needs. It is also resolved to authorize the Director of this School to update the elective courses, OE/VSC/SEC courses from time to time as per the University Policy decisions/norms.
4	Agenda 4: To identify writers/ editors for Self Learning Material [SLM] development task	The PAC members unanimously gave their consent for writing/editing of the Self Learning Material [SLM] for the 4 year B.Sc. (Honours in Major and Minor) programmes. Any one Major from Physics, Chemistry, Mathematics, Botany, Zoology and one Minor (other than major). PAC members agreed to recommend experts for SLM development of core, practical and elective courses, in due course of time. It is also resolved to authorize the Director of this School to enrich and update the list of writers/editors for Self Learning Material [SLM] development task from time to time as per the University Policy decisions/norms.
	Action Taken: List of recommended writers and editors of the Self Learning Material for all the 12 B.Sc. (Honours in Major and Minor) programmes has been prepared. Refer Appendix IV for this List.	

Meeting ends with vote of thanks by **Mr. Manish Shingare**.

Thanks...



(Dr. Chetana Kamlaskar)

Director (I/C), School of Sciences

And Chairperson, PAC for B.Sc. (Honours in Major and Minor)

Appendix I: List of Programmes

Existing 3 year (Six Semester Degree) Programme	Name of New UG Programmes Bachelor of Science (Honours in Major and Minor), Four-Year (Eight Semester Degree programme) as per NEP 2020
1. V92: BSc(PCM) {2015 pattern} 2. V100: BSc(BCZ) {2023 pattern} P- Physics, C- Chemistry, M- Mathematics, B- Botany, Z- Zoology	1. B.Sc. (Honours) (Major in Physics and Minor in Chemistry) (2024 Pattern) 2. B.Sc. (Honours) (Major in Physics and Minor in Mathematics) (2024 Pattern) 3. B.Sc. (Honours) (Major in Mathematics and Minor in Chemistry) (2024 Pattern) 4. B.Sc. (Honours) (Major in Mathematics and Minor in Physics) (2024 Pattern) 5. B.Sc. (Honours) (Major in Chemistry and Minor in Physics) (2024 Pattern) 6. B.Sc. (Honours) (Major in Chemistry and Minor in Mathematics) (2024 Pattern) 7. B.Sc. (Honours) (Major in Chemistry and Minor in Zoology) (2024 Pattern) 8. B.Sc. (Honours) (Major in Chemistry and Minor in Botany) (2024 Pattern) 9. B.Sc. (Honours) (Major in Zoology and Minor in Chemistry) (2024 Pattern)

	10. B.Sc. (Honours) (Major in Zoology and Minor in Botany) (2024 Pattern)
	11. B.Sc. (Honours) (Major in Botany and Minor in Chemistry) (2024 Pattern)
	12. B.Sc.(Honours) (Major in Botany and Minor in Zoology) (2024 Pattern)

Appendix II: Modified Programme Structures

1) PROGRAMME STRUCTURE AND CREDIT DISTRIBUTION

Please refer attached .zip folder of the following programmes which contains Programme Structure and Credit Distribution

1. SOS_4YUG_APAC_Physics_25Oct2023_pdf.rar
2. SOS_4YUG_APAC_Maths_25Oct2023_pdf.rar
- 3a. SOS_4YUG_APAC_Chemistry_26Oct2023_pdf(PCM).rar
- 3b. SOS_4YUG_APAC_Chemistry_26Oct2023_pdf(CBZ).rar
4. SOS_4YUG_APAC_Zoology_26Oct2023_pdf.rar
5. SOS_4YUG_APAC_Botany_26Oct2023_pdf.rar

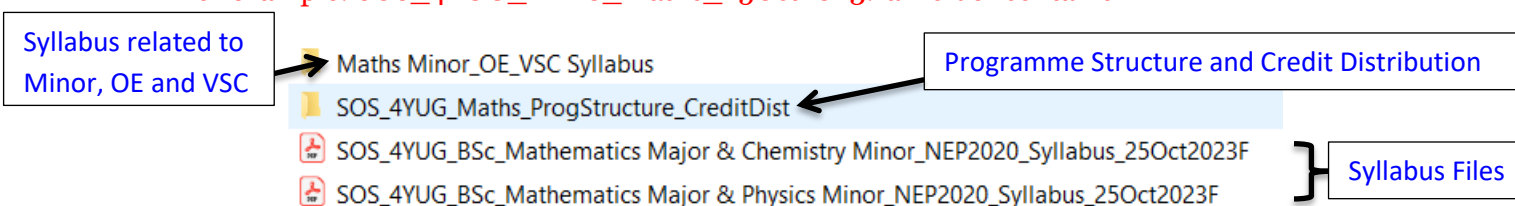
Appendix III: Syllabus of Proposed 12 Programmes

1) SYLLABUS OF 12 PROPOSED PROGRAMMES

Please refer attached .zip folder of the following programmes which contains syllabus files of each proposed programmes

1. SOS_4YUG_APAC_Physics_25Oct2023.rar
2. SOS_4YUG_APAC_Maths_25Oct2023.rar
- 3a. SOS_4YUG_APAC_Chemistry_26Oct2023_pdf(PCM).rar
- 3b. SOS_4YUG_APAC_Chemistry_26Oct2023_pdf(CBZ).rar
4. SOS_4YUG_APAC_Zoology_26Oct2023_pdf.rar
5. SOS_4YUG_APAC_Botany_26Oct2023_pdf.rar

For example: SOS_4YUG_APAC_Maths_25Oct2023.rar folder contains



Appendix IV: List of Writes/Content Editors for Self Learning Material development of Proposed 12 Programmes

1) REFER WRITES/CONTENT EDITORS FOR SELF LEARNING MATERIAL DEVELOPMENT OF 12 PROPOSED PROGRAMMES OF FEW COURSES AT SEM01 AND 02.