

**Meeting of the Board of Studies of Mathematics and Statistics department,
Sophia College held on April 20,2024.**

The meeting was conducted via the department zoom link on Friday October 27, 2023 at 5.00pm.

The meeting was attended by Dr.(Mrs.) Smita Rajesh Patgaonkar, Dr. (Mrs.). Reena Deepak Nagda, Dr Annapurna, Mrs Rekha Watve, Mrs Sandra Mendes and Ms Vidya Konar.

Mrs Sandra Mendes (Head of the department) welcomed the members to the meeting.

The minutes of the previous meeting (held on June 13,2023) was read out and was passed by the members of the Board of Studies.

The members were informed to the different papers being introduced by the department in the third and fourth semester (SYBSc) of the academic year 2024-25 under NEP. The faculty informed the members that Mathematics and Statistics was being offered as MINOR subjects to the students of class SYBSc. A Vocational Skill Course in Quantitative Techniques in Semester 3 and a Skill Enhancement Course in Mathematical Models using Decision Theory in Semester 4 was being introduced in the year 2024-25.

The syllabus of the above papers was discussed with the members for Semester 3 and 4 of AY 2024-25. The various suggestions given by the members was taken note regarding the content, teaching and projects for the students in the current academic year.

The members were made aware that there could be changes in the format of the papers both at the FYBSc level and SYBSc level if the University or the Government issues any circulars.

The Minor courses – Mathematics and Statistics of 4 credits would be taught as a 3 credit theory and a 1 credit course of Practicals.

The Vocational Skill Course and the Skill Enhancement course would be a 2 credit practical course.

Apart from this following courses will be taught to the first years students in the first and second semester. The syllabi of these papers (which is the same as the courses in the first semester and had been discussed in the previous BOS) was discussed along with a feedback from the department and suggestions which could be worked out to make the paper more relevant and application oriented.

1. Open Elective 1 – OE203A Graphical presentation of Numerical Information.
2. Open Elective 2 – OE203B Number systems and their Applications.
3. Value Enhancement Course - VEC205 – Digital Empowerment
4. Mathematics Paper 1- SMAT111MN - Calculus -1 Real Numbers, Functions, Limits and Continuity
5. Mathematics Paper 1(MINOR)Practicals - SMAT122MNP Calculus-1 Practical
6. Mathematics Paper 2(MINOR)- SMAT122MN Calculus-2 – Derivatives, Applications Mean Value theorem
7. Mathematics Paper 2(MINOR) Practical- SMAT122MNP Calculus-2 Practical

8. Statistics Paper 1 (MINOR) – SSTA111MN Descriptive Statistics-1 – Data Condensation, Graphs and Diagrams, Measures of Central Tendency and Variation
9. Statistics Paper 1 (MINOR) – SSTA111MNP Descriptive Statistics-2 Practicals
10. Statistics Paper 2 (MINOR) – SSTA122MN Descriptive Statistics-2 – Correlation and Regression, Time Series and Index Numbers
11. Statistics Paper 2 (MINOR) – SSTA122MNP Descriptive Statistics-2 Practicals
12. Open Elective 1 – OE203A Graphical presentation of Numerical Information.
13. Open Elective 2 – OE203B Number systems and their Applications.
14. Value Enhancement Course - VEC205 – Digital Empowerment

The methods of evaluation of the papers - continuous tests and the semester end examination formats was discussed. The members discussed about mapping the questions with the Blooms taxonomy in order to make the evaluation more relevant and attaining the objectives of the courses.

The suggestions made by the members were discussed regarding the new syllabus

1. The Reference books will be of the latest editions. Whereever possible, include links to online lessons through pdfs, videos and blogs in the reference. The faculty has agreed to this suggestion.
2. The terminologies used, programme outcomes and the course outcomes were discussed in detail.
3. The suggestion was made regarding crunching of the syllabus so as to give the students a wide range of application oriented topics in Statistics eg Semester 1 – Descriptive Statistics; Semester 2 – Statistical Methods; Semester 3 – Design of Experiments and Semester 4 - Parametric and non-parametric tests
4. The evaluation activities can be made broad and include various formats of evaluation.
5. Data story telling was an idea that was floated about how the data could be interpreted and inferred by the students to concur or dispute with the objectives.
6. Certain changes and corrections were also incorporated in the syllabus. The evaluation format for the summative exams could be put in a table form for better understanding.
7. The evaluation procedure and the modes of passing were also discussed.
8. The relevant softwares for the practicals was also discussed. It was felt that the topics should be such that the students would get interested in the concepts and applications of the paper.

The chair thanked the members for attending the meeting and for their valuable suggestions. The members were also informed that the workload map was not finalised and hence there could be changes in the papers. These changes would be incorporated in the syllabus. The members would be informed about the changes and their consent would be obtained.