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|--|--|--------------------------------|-----------------------------------|--------------------|--------|----------------|
| Program  |  | Type of studies (cycle)        | Third cycle                       |                    |        |                |
|  |  | Name of the program            | Science and mathematics education |                    |        |                |
| <b>Course</b>  |  |                                |                                   |                    |        |                |
| Course title   |  | <b>Statistical convergence</b> |                                   |                    |        |                |
| Course code  | Semester   | Course status                  | ECTS credits                      | Contact hours      |        |                |
| PMAT630  | II   | Optional                       | 10                                | 30                 |        |                |
| Teaching staff   | Teacher  |                                |                                   |                    |        |                |
|  | Other staff  |                                |                                   |                    |        |                |
| Course goals   | The aim of the course is to introduce students to the concept of statistical convergence of sequences, its characterization and links to other methods of summability. |                                |                                   |                    |        |                |
| <b>Course content/topics</b>   |  |                                |                                   |                    |        |                |
| <ul style="list-style-type: none"> <li>- Definition and properties of statistical convergence</li> <li>- Relations between statistical convergence and other summability methods</li> <li>- Characterization of statistical convergence</li> <li>- Summability of sequences and infinite matrices</li> <li>- Statistical A-convergence</li> <li>- Statistical strong convergence</li> <li>- Lacunary statistical convergence</li> <li>- Almost convergence of sequences</li> </ul> |  |                                |                                   |                    |        |                |
| <b>LITERATURE</b>  |  |                                | <b>Grading</b>                    |                    |        |                |
| [1] Anindita Basu, Statistical and lacunary statistical convergence of sequences, LAP Lambert Academic Publishing, 2011.<br>[2] Hardy,G.H. Divergent series, 1949.<br>[3] George A. Anastassiou, Oktay Duman, Towards Intelligent Modeling: Statistical Approximation Theory, Springer, 2011.  |  |                                |                                   | Criterion          | Points | Cut-off points |
|  |  |                                | 1.                                | Written assignment | 25     | 13             |
|  |  |                                | 2.                                | Project            | 25     | 12             |
|  |  |                                | 3                                 | Final exam         | 50     | 30             |
|  |  |                                | Total                             |                    | 100    | 55             |