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| <b>ID</b>                | 2948   |
| <b>Curricular Unit</b>   | Mathematics I  |
| <b>Regent</b>            | Maria de Fátima Fabião Ribeiro   |
| <b>Learning Outcomes</b> | Introduction to calculus in R and applications.  |
| <b>Syllabus</b>          | <ol style="list-style-type: none"><li>1. A few aspects of logic and set theory.</li><li>2. The real number system.</li><li>3. Infinite sequences. Series.</li><li>4. Functions of one variable: limits and continuity.</li><li>5. Differential calculus of real valued functions.</li><li>6. Single variable optimization.</li><li>7. Integral calculus.</li></ol> |
| <b>Evaluation</b>        | Progressive learning of mathematical topics. Final exam.   |
| <b>Bibliography</b>      | Sydsaeter, Knut and Peter Hammond, Essential Mathematics for Economic Analysis, FT Prentice Hall, 2008.  |