# Course Descriptions None 2020-2021

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| Course Title | Analysis II |
| Course Code | EBC1032 |
| ECTS Credits | 6,5 |
| Assessment | Whole/Half Grades |

Period

| Period | Start | End | Mon | Tue | Wed | Thu | Fri |
|---|---|---|---|---|---|---|---|
| 4 | 1-2-2021 | 26-3-2021 | X | | X | | |
| 5 | 12-4-2021 | 28-5-2021 | X | | X | | |

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| Level | Intermediate |
| Coordinator | Janos Flesch For more information:j.flesch@maastrichtuniversity.nl |
| Language of instruction | English |
| Goals | Learn the concepts and techniques in the field of integral calculus that are prerequisite for 'probability theory', '(applied) statistics', 'mathematical economics' and 'operations research'.<br>Can check the topological properties of a subset of the plane.<br>Know how to prove that a function of two variables is continuous.<br>Be able to apply the Implicit Function of Theorem.<br>Know how to prove that a function of two variables has a directional derivative or is (totally) differentiable.<br>Learn to solve constrained and unconstrained optimisation problems. |
| Description | PLEASE NOTE THAT THE INFORMATION ABOUT THE TEACHING AND ASSESSMENT METHOD(S) USED IN THIS COURSE IS WITH RESERVATION. THE INFORMATION PROVIDED HERE IS BASED ON THE COURSE SETUP PRIOR TO THE CORONAVIRUS CRISIS. AS A CONSEQUENCE OF THE CRISIS, COURSE COORDINATORS MAY BE FORCED TO CHANGE THE TEACHING AND ASSESSMENT METHODS USED. THE MOST UP-TO-DATE INFORMATION ABOUT THE TEACHING/ASSESSMENT METHOD(S) WILL BE AVAILABLE IN THE COURSE SYLLABUS. Functions of more than one variable, series, multiple integrals, integral calculus of functions of one variable. |
| Literature | Syllabus. |
| Prerequisites | - Differential calculus for functions of one variable (as, for instance, in the course Analysis 1).<br>- Elementary linear algebra (as, for instance, in the course Linear Algebra).<br>An advanced level of English. |
| Teaching methods | Lecture / Assignment |
| Assessment methods | Written Exam |
| Evaluation in previous academic year | For the complete evaluation of this course please click http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM |

This course belongs to the following programme / specialisation

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| Bachelor Econometrics and Operations Research | Year 1 Compulsory Course(s) |