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| Code of course: **BMI-LOTD17-307E.01, BMA-LOTD-307.01** |
| Title of course: **Model Theory II.** |
| Lecturer: **Ildikó Sain** |
| **General aim of the course:**  This course intends to be an introduction to model theory, but in a greater speed than the first Model theory course.  The basic notions of model theory are structures and first-order logic; model theory is essentially the study of the relationships between these two notions.  **Content of the course:**   1. Structures 2. Terms and varieties 3. Sentential logic 4. First-order logic 5. The compactness theorem 6. Basic model theory 7. Morley’s theorem 8. Morley rank 9. Interpolation 10. Countable models 11. The number of types and models   **Grading criteria, specific requirements:**  There will be a final written exam, but there will be tests during the semester, too, The results of all the tests will contribute to the final grade.  The students must have a background in naive set theory, first order logic, and sentential logic. Some background in universal algebra is also useful.  **Required reading:**  We will follow (parts of) the lecture notes by J. D. Monk, <http://euclid.colorado.edu/~monkd/m6000.pdf> |