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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> |