Course Syllabus:
Dynamical Systems BMETE93MM02

Instructor Information:
Instructor: Prof. Károly Simon, office: H 507
www.math.bme.hu/∼simonk, simonk@math.bme.hu
Time and Place: Monday 12:15-15:45, BME H 46,
All information about the course:
http://www.math.bme.hu/∼simonk/dynsyst
Office Hours: Tentatively, Monday 8:00-9:00
Language of instruction: English
Text in English:
Slides of the lectures of the course can be found at:
http://www.math.bme.hu/∼simonk/dynsyst
W. Parry, Topics in Ergodic Theory, Cambridge Univ. Press, 1981,
P. Walters, An Introduction to Ergodic Theory. Springer,
S. Wiggins, Introduction to Applied Nonlinear Analysis and Chaos, Springer, Berlin, 1988.
Most of the text available in Hungarian:
`http://www.math.bme.hu/~simonk/dinamikai_rendszerek`
Prerequisites: This is a course for MSc and PhD students and also for BSc students with mathematics or applied mathematics major. No further prerequisites.
Homework: Homework will be assigned regularly.
Grading policy: No midterms. Although the questions in the exams will always be presented in English, students can opt between writing the answers either in Hungarian or in English. The final exam consists of two parts. One of them is about the definitions, theorems, proofs presented during the course. The other part of the exam consists of exercises.

(1) Homeworks: 20 points,
(2) Final exam: 80 points.

Grading:

Fail (1)	0 -39	points
Pass (2)	40-54	points
Satisfactory (3)	55-69	points
Good (4)	70-84	points
Excellent (5)	85-100	points

Topics:

(1) Ergodic measures
(2) Entropy
(3) Thermodynamical formalism
(4) Bowen-Sinai-Ruelle measure