Handout 1
Information Theory and Coding
General Course Information Sep. 20, 2022

Information Theory and Coding

Time and Location:
Mondays, 11-13, BC 01 (lecture)
Tuesdays, 13-15, ELA 2 (lecture)
Tuesdays, 15-17, ELA 2 (exercise)

Instructor:
Emre Telatar (INR 117, 37693, emre.telatar@epfl.ch)
Office Hours: By appointment

Teaching Assistants:
Mert Bora Dogan (INR 034, 38790, bora.dogan@epfl.ch)
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Administrative Assistant:
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Pre-requisites:
Probability and Statistics (I and II) or Stochastic Processes for Communications

Web page: http://ipg.epfl.ch


Course Mechanics:
Weekly Assignments
One graded homework (date TBA, 10%)
Midterm Quiz (40%)
Final Exam (50%)

Approximate Outline:
Properties of information measures (4-5 lectures)
Source coding (7-8 lectures)
Capacity and the channel coding theorem (5-6 lectures)
Coding techniques for reliable communication (4-5 lectures)
Multi-user channels (4-5 lectures)
Additional topics (1-2 lectures)

Reference Material:
2. C. E. Shannon (with W. Weaver), The Mathematical Theory of Communication, U. of Illinois Press, 1963. (see also the course webpage)