

SCHOOL OF ELECTRICAL ENGINEERING  
**Signal Theory**: EQ1220 / EQ1210

Reading Assignment: Sampling and Reconstruction (5/5) 2015–09–23,

**Notice:** To be collected before Lecture 10 (2015-09-30).  
The essay consists of two questions. If you successfully answer all questions, you obtain 1 bonus point for part A of the final exam. An essay with partially correct answers will give you 1/2 point.  
For the answers you should not copy text from a textbook. Group work is also not allowed, but feel free to discuss with your fellows. The reports will be checked against plagiarism.  
Be brief, i.e., at most 1 page.

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Explain (in your own words) ...

1. ... *Pulse Amplitude Modulation*. (Hint) Your short essay could for example answer the following questions: what is the goal of PAM? How does it work? What mathematical relations exist between input and output signals? You should also describe the PAM of stochastic processes with formulas, figures and/or examples.
  2. ... *the aliasing effect*. (Hint) Your short essay could for example answer the following questions: Is it a positive effect? What is its cause? How is it mathematically characterized? How to avoid it? You should as usual use formulas, figures **and** examples.
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