

FEEDBACK FORM  
March 25, 2009

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This primary aim of this form is to collect **feedback on the homework**. Please note that using this form is **voluntary**– if you do not want to say anything, do not turn this form in. Also please **do not put your name** on this sheet. If you want to give your feedback but do not want to write it down on paper, please feel free to leave anonymous comments in the comments section of the entry for today’s lecture on the course blog. As always, **general feedback on the class is very welcome**. Feel free to write about whatever you think you want changed in the class as well as what you think is good with the class (so that I can make sure that those things do not fade away).

You will have the last five minutes of the lecture to yourself, if you want to fill in this form in class.

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1. The multiple choice questions all deal with the homework. (The first six are general questions and the rest are questions for individual problems in the homework.)
  - (a) Overall difficulty of the homework.
    - i. Please: the homework was a breeze.
    - ii. Mostly easy: except for one or two problem, the homework was easy.
    - iii. Balanced: The blend of difficult and easy problems was prefect.
    - iv. Too hard: I had difficulty with most of the problems.
    - v. Other (Specify):
  - (b) For the problems you had found challenging.
    - i. N/A: as I said before, all the problems were easy.
    - ii. I had all the necessary background but it took a bit of time for everything to fall into place.
    - iii. I had little background but I managed to work it out.
    - iv. The lack of background knowledge was crippling.
    - v. Other (Specify):
  - (c) The problems overall were
    - i. Interesting: I learned new coding theory stuff and it also crystallized the material covered in the course.
    - ii. Mostly interesting: I learned new things in coding theory but it seemed pretty disjoint from the lectures.
    - iii. Mildly interesting: I could see why someone (other than me) would be interested in these problems.
    - iv. Waste of time: I do not see why this homework was given out in this course.
    - v. Other (Specify):
  - (d) When did you start working on the homework?
    - i. The day the homework was handed out.
    - ii. I looked at the homework the day it was handed out but started working on it a week before the deadline.
    - iii. I started working on it on Friday before the deadline.
    - iv. I started to work on the homework the day before it was due.
    - v. Other (Specify):

- (e) Total time given to work on the homework.
  - i. The 3 weeks+ one weekend was more than enough.
  - ii. Well, one of the 3 weeks was the spring break so it was more like 2 weeks+ one weekend. It was still fine.
  - iii. Well, one of the 3 weeks was the spring break so it was more like 2 weeks+ one weekend. Real three weeks would have been enough.
  - iv. One more week would have been good.
  - v. I have better things to do in life other than work on your blasted homework.
  - vi. Other (Specify):
- (f) The problems with no credits.
  - i. I did not even look at those problems.
  - ii. The problems looked interesting but I did not have time to think about them at all.
  - iii. I thought about the problems a bit but did not make much headway.
  - iv. I solved them!
  - v. Other (Specify):
- (g) Problem 1 (Systematic Codes)
  - i. This was very easy.
  - ii. This was easy once I remembered my linear algebra.
  - iii. This was moderately difficult.
  - iv. This was hard.
  - v. Other (Specify):
- ★ Hint on Problem 1
  - i. The hint was not needed.
  - ii. The hint was somewhat useful.
  - iii. The hint was useful.
  - iv. Other (Specify):
- (h) Problem 2 (Operations on Codes)
  - i. This was very easy.
  - ii. This was easy once I reviewed basic coding theory stuff.
  - iii. This was moderately difficult.
  - iv. This was hard.
  - v. Other (Specify):
- (i) Problem 3 (Distance of General Random codes)
  - i. This was very easy.
  - ii. This was easy once I remembered my probability and/or read the Varshamov proof.
  - iii. This was moderately difficult.
  - iv. This was hard.
  - v. Other (Specify):
- ★ Hint on Problem 3
  - i. The hint was not needed.
  - ii. The hint was somewhat useful.
  - iii. The hint was useful.
  - iv. Other (Specify):

- (j) Problem 4 (Toeplitz Matrix)
- i. This was very easy.
  - ii. This was easy once I remembered my probability.
  - iii. This was moderately difficult.
  - iv. This was hard.
  - v. Other (Specify):
- ★ Hint on Problem 4
- i. The hint was not needed.
  - ii. The hint was somewhat useful.
  - iii. The hint was useful.
  - iv. Other (Specify):
- (k) Problem 5 (Shannon's Capacity theorem for  $BSC_p$ )
- i. This was very easy.
  - ii. This was easy once I went through Shannon's proof.
  - iii. This was moderately difficult.
  - iv. This was hard.
  - v. Other (Specify):
- ★ Hint on Problem 5
- i. The hint was not needed.
  - ii. The hint was somewhat useful.
  - iii. The hint was useful.
  - iv. Other (Specify):
- (l) Problem 6 (Capacity theorem for Erasure Channels)
- i. This was very easy.
  - ii. This was easy once I went through the four steps one by one.
  - iii. This was moderately difficult.
  - iv. This was hard.
  - v. More hints would have been nice.
  - vi. Other (Specify):
- (m) Problem 7 (Alternate definition of RS codes)
- i. This was very easy.
  - ii. This was easy once I became more comfortable with finite fields.
  - iii. This was moderately difficult.
  - iv. This was hard.
  - v. Other (Specify):
- ★ Hint on Problem 7
- i. The hint was not needed.
  - ii. The hint was somewhat useful.
  - iii. The hint was useful.
  - iv. Other (Specify):

(n) Problem 8 (List decodability of random linear codes)

- i. This was very easy.
- ii. This was easy once I carefully read the proof of the list decoding capacity.
- iii. This was moderately difficult.
- iv. This was hard.
- v. Other (Specify):

★ Hint on Problem 8

- i. The hint was not needed.
- ii. The hint was somewhat useful.
- iii. The hint was useful.
- iv. Other (Specify):

2. Use the space below to write down any thoughts you might have on the homework and/or the class (letting me know what is going right *and* what is going wrong would be very helpful in making changes (if any) in the rest of the semester).