

CALIFORNIA INSTITUTE OF TECHNOLOGY
Computing and Mathematical Sciences

ACM/EE 116

Course Survey

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Fall 2011

Issued: 27 Sep 2011
Due: 28 Sep 2011

The purpose of this survey is to get a sense of the background and level of the students in the class. Please mark your answers in the space provided.

Please turn in this survey by the end of class (27 Sep) or by 28 Sep (Wed) at 5 pm in the mailbox outside of 109 Steele.

1. What is your current option (ACM, EE, Bi, etc)? _____ Year (Jr, Sr, G1, G2, etc)? _____
2. Put a check mark next to any of the following courses that you have already taken. Put a 'C' if you are currently enrolled in the course:

| | |
|---|---|
| <input type="checkbox"/> ACM 95/100 (complex variables, ODEs) | <input type="checkbox"/> CS/CSN/EE 156 (learning systems) |
| <input type="checkbox"/> ACM 104/AM 125/CDS 201 (linear analysis) | <input type="checkbox"/> EE 112 (signal processing) |
| <input type="checkbox"/> ACM/ESE 118 (statistical analysis) | <input type="checkbox"/> EE/Ma 126 (information theory) |
| <input type="checkbox"/> CDS 110/EE 113 (control systems) | <input type="checkbox"/> EE 160 (communication systems) |
| <input type="checkbox"/> CS/CNS/EE 154 (artificial intelligence) | <input type="checkbox"/> Ma 112 (statistics) |

3. Please rank your understanding of the following topics on a scale of 1 to 5, using the following classification:

| | | | | |
|-------------------------|---|---------------------------------|---|-----------------------------|
| 1 | 2 | 3 | 4 | 5 |
| never heard of topic | | remember main ideas/concepts | | very familiar with topic |

Note: it is *completely OK* if you have not heard of many of these topics. The purpose of the survey is to gauge the background of the class. We will cover most (if not all) of these topics in ACM/EE 116.

| | | |
|---|--|---|
| <input type="checkbox"/> σ fields (probability spaces) | <input type="checkbox"/> conditional probability | <input type="checkbox"/> correlation |
| <input type="checkbox"/> discrete random variables | <input type="checkbox"/> Bayes' rule | <input type="checkbox"/> random walks |
| <input type="checkbox"/> continuous random variables | <input type="checkbox"/> covariance | <input type="checkbox"/> Gaussian process |
| <input type="checkbox"/> Bernoulli distribution | <input type="checkbox"/> generating functions | <input type="checkbox"/> Wiener process |
| <input type="checkbox"/> Gaussian distribution | <input type="checkbox"/> random processes | <input type="checkbox"/> Ito calculus |

4. What is the reason you are taking the class (check all that apply)?

| | |
|---|---|
| <input type="checkbox"/> Option requirement | <input type="checkbox"/> Recommended by advisor |
| <input type="checkbox"/> Need for my research | <input type="checkbox"/> Recommended by friend |
| <input type="checkbox"/> Interested in topic | <input type="checkbox"/> Other: _____ |

5. Are there any specific applications of probability and random processes that you are interested in?