

6	9	13	7
12		10	5
3	1	4	14
15	8	11	2

Mathematics for Computer Science 6.042J/18.062J

WELCOME!....
Prof. Albert R Meyer



Albert R. Meyer, 2016

February 3, 2016

welcome.1

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6.042 Quick Summary

1. Fundamental Concepts of Discrete Mathematics (*sets, relations, proof methods,...*)
2. Discrete Mathematical Structures (*numbers, graphs, trees, counting...*)
3. Discrete Probability Theory



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Strong Math Experience

If you have

- been on a school Math Team
- done Math competitions (like Olympiad, Putnam, MAA)
- taken one or more of 6.006, 18.100, 18.06, 18.200, or a more advanced subject



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Strong Math Experience

If you have

- been on a school Math Team
 - done Math competitions (like Olympiad, Putnam, MAA)
 - 6.006, 18.100, ...:
- 6.042 may not be the best use of your time.



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Strong Math Experience

Discuss 6.042 alternatives
with the Instructor

6042-instructors@mit.edu



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Vocabulary

Quickie:

What does "discrete" mean?
(\neq "discreet")



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Stellar Web site

- notes, handouts
- class calendar
- course organization
- problem submission

<https://stellar.mit.edu/S/course/6/sp16/6.042/>



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Reading Assignment

Readings & online problems
in class **calendar on Stellar**
due **starting Friday**



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MITx site: **6.042r**

Register for session
assignment by
Friday midnight
(find link on Stellar)
site has **videos, slides,**
online questions



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How the Class Works

Active learning in Teams

MWF 1.5 hour sessions:

- Teams of same 6–8 students with Team Coach.
- Team learning through problems & discussion



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How the Class Works

- **required attendance**
- **videos, online problems** most days
- **4 90 min. evening midterms**
- **psets: weekly (not midterm weeks)**
- **comment** in Piazza



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Teamwork

The **good** about teams:

- an efficient way to learn
- fun (for many students)
- like professional organizations
- learn to communicate
- cope with diversity

...USUALLY



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Teamwork

The **bad** about teams:

- must be there **prepared!**
- unremitting
- and sometimes:
 - very strong are slowed down
 - very weak left behind
 - deal with unpleasant people



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Teamwork

Your **team coach** will be working to bring out the **good** and control the **bad**
(TAs & instructor too)



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Teamwork

Team approach is **controversial**

$\frac{1}{4}$ love it
 $\frac{1}{4}$ hate it
 $\frac{1}{2}$ neutral



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Teamwork

In **F16**, 6.042 will be taught in usual **lecture/recitation style.**



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MITx site: 6.042r

Register for team
assignment by
Friday midnight
(find link on Stellar)



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