

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

*Mathematics for Computer Science*  
6.042J/18.062J      Spring 2018

WELCOME!....

Dr. Zachary Abel



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# Mathematics for Computer Science

6.042J/18.062J Spring 2018

## WELCOME!....

# Prof. Albert R Meyer



Former 6.042 instructor,  
current part-time instructor

Creator of much of 6.042's  
course material



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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 team
- done Math competitions (like *Olympiad*, Putnam, MAA)
- taken more of 6.042, 6.0100, 18.06, 18.200, or more advanced subject

*6.042 may not be for you!*

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# Strong Math Experience?

Discuss **6.042 alternatives**  
with the Instructor

[6042-instructors@mit.edu](mailto: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/sp17/6.042/>

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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
- four 90 min. evening midterms
- psets: weekly (not midterm weeks)

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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 F18, 6.042 will  
be taught in usual  
lecture/recitation  
style.



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# Register on MITx

Register for team  
assignment by

Friday midnight

MITx link on Stellar