

Research and Development

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Looking ahead (tentative)

Nov 2 – Teams

Nov 9 – Powerpoint and Latex

Nov 16 – Assignments and syllabi

Nov 23 – Talks

Nov 30 – Breakout: team assignments

Dec 7 – What's next: quals and careers

Why teamwork is important

PhD graduates lead teams or work in teams

- In our dept, about 10 PhDs granted each year
- Half go on to academic jobs

Recent placement includes faculty jobs at:

- U. Florida, Polytechnic, Hofstra, UMDNJ, Virginia Tech, College of Staten Island, Lehigh, Ohio State, Fordham, RPI

Postdocs at

McGill, UT Austin, NYU, Los Alamos

- Most of the rest go into industrial research
 - IGM, NEC, Siemens, Sarnoff

Teams in academia

Two person teams:

- Student and advisor

Multiple person teams:

- Research project
(often interdisciplinary)

Teams in industry

Big groups doing real work

Team theory

Kathleen M. Eisenhardt (Stanford)

Amy C. Edmondson (Harvard)

Some teams I've been on

SIGGRAPH 2004:

Three faculty

Three graduate students

Two undergrads

Two actors

Lab technician

Team issues

Setting expectations

Speaking up

Balancing team and self

Diversity and conflict

Teamwork is not all fun

- Team members will sometimes disagree about how to do things
- It's bad when team members all share the same perspective: "groupthink"

Team members with different expertise

- Disagree more
- Achieve better results

Diversity and conflict

Conflict is not good in itself, though

- Personality clashes and emotional conflicts lead to worse team performance

Teams with diverse backgrounds

- race, culture, age, etc.,

have to work harder to develop trust and maintain collaboration.

Trust and communication

Nobody wants to get blamed for failure or rejected for difference.

- Sometimes people will avoid pointing out problems or mistakes.
- Sometimes people will avoid making suggestions or voicing opinions.

Recipes for success

Set clear individual goals, and share them.

- What do you want to learn?
- What are your responsibilities?
- How do you want to reflect on your participation and contributions?

Recipes for success

Get to know everybody.

- Understanding others' situations fosters respect and flexibility.
- Your rapport with other team members is an investment for when things get tough.

Recipes for success

Think of performance in team terms

- Pointing out obstacles helps the team.
- The whole team needs to overcome them.