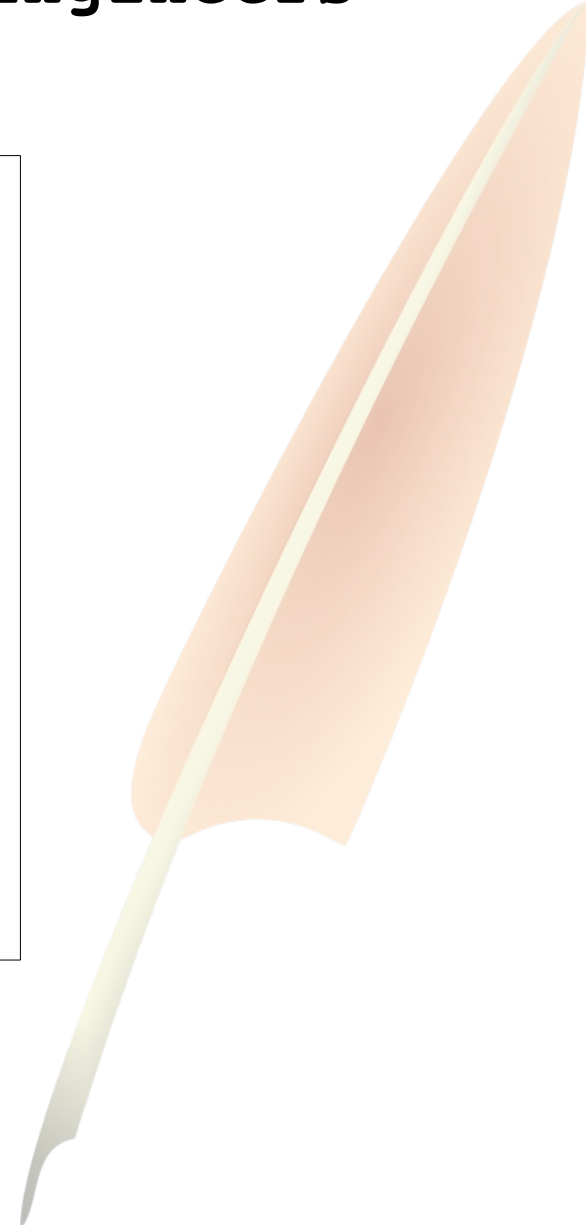# BLG374E
Technical Communications for Engineers
Collaborative Writing

Lecture Contents:
- Why group writing
- Dangers in group writing.
- Common divisions of labour.
- Exercises:
    - Strength identification.
    - Sub-task identification.
    - Deliverables exercise.
- Phases in a writing project.
- Planning sessions.
- Collaborative editing software.
- General tips.

Why group writing?

- You can get better results!

  - Different areas of expertise.

  - Different presentation skills.

  - Different perspectives.

- Working in teams:

  - Valuable skill.

  - Practice good!

- See how other people work.

Why group writing?

- A common necessity:

    - Engineering projects.

        - Collaborating on specifications.

        - Documentation.

        - Reports on projects.

        - Etc.

    - Research projects.

        - Writing grant proposals.

        - Collaborating on theoretical positions.

        - Writing up results.

        - Etc.

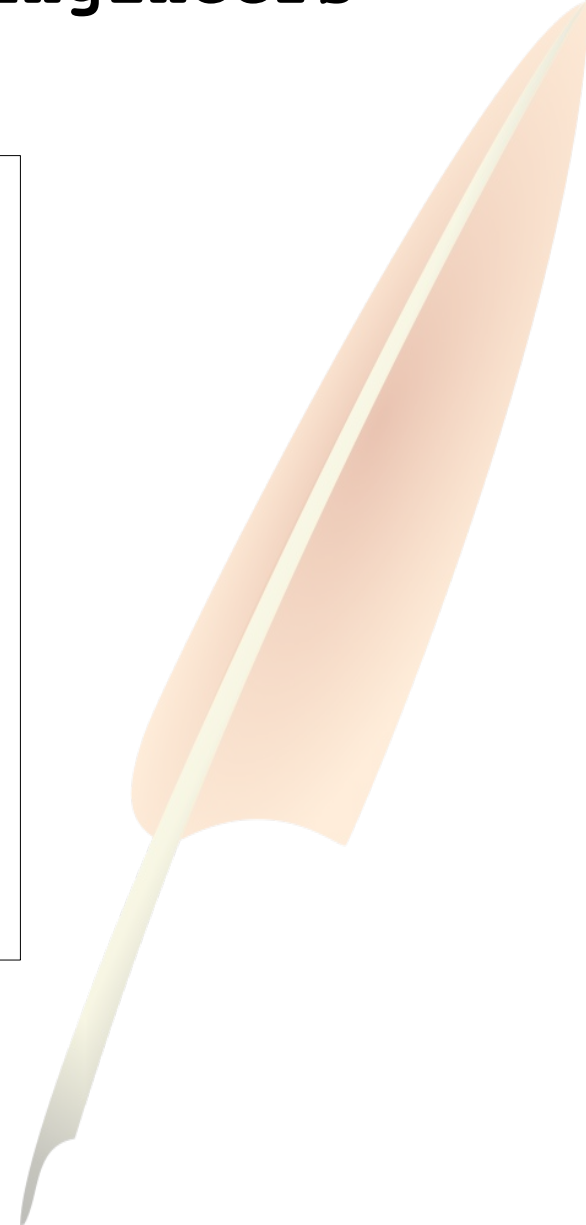   - Business...

    - Education...

    - ...

Get used to it!

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Dangers in group-writing

Danger	Possible Solutions	
Underutilised skills.	Identify strengths early.	Divide labour.
Lack of coordination.	Agree on process.	Assign coordinator(s).
Process heavy.	Simplify process / divide labour.	Assign coordinator(s).
Broken hearts.	Cultivate sensitivity, respect, positive criticism.	Verbalise problems.
Freeloading / credit assignment.	Explicit recognition.	Negotiate expectations.
Groupthink.	Encourage dissent.	Encourage quieter members.

Common divisions of labour.

- Research & practical work
  (many roles).
- Coordination.
- Draft text preparation.
- Text polishing.
- Layout and formatting.
- Graphics preparation.
- Proofreading.
- Re-drafting.
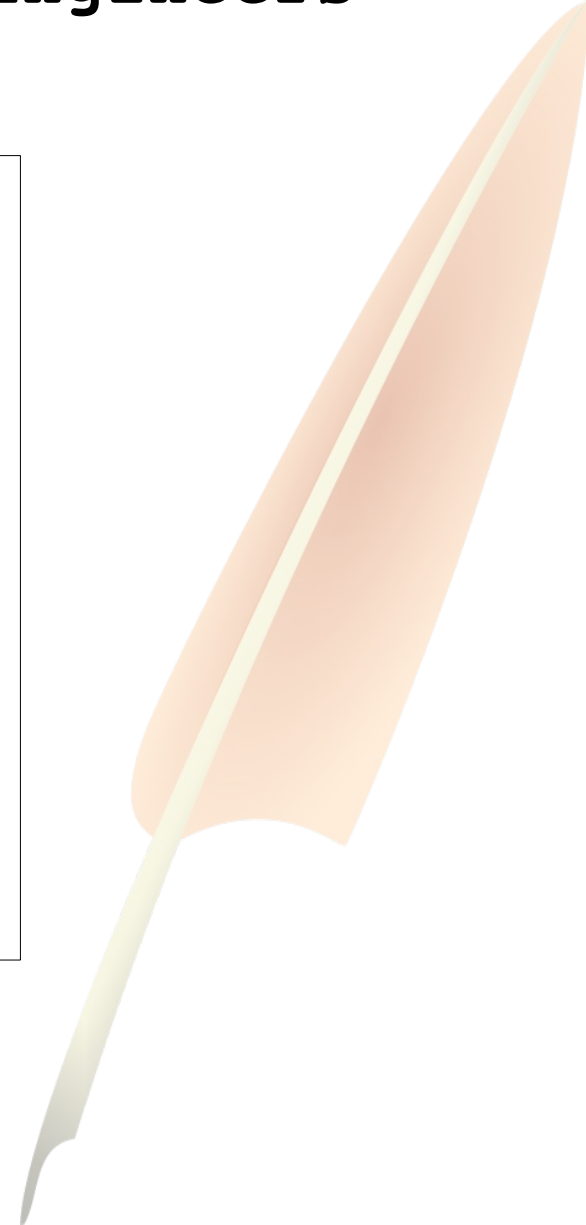- **Note: editing and redrafting is time-consuming**.

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Strength identification exercise

As a group, identify the relative strengths of each of your members (4 minutes).
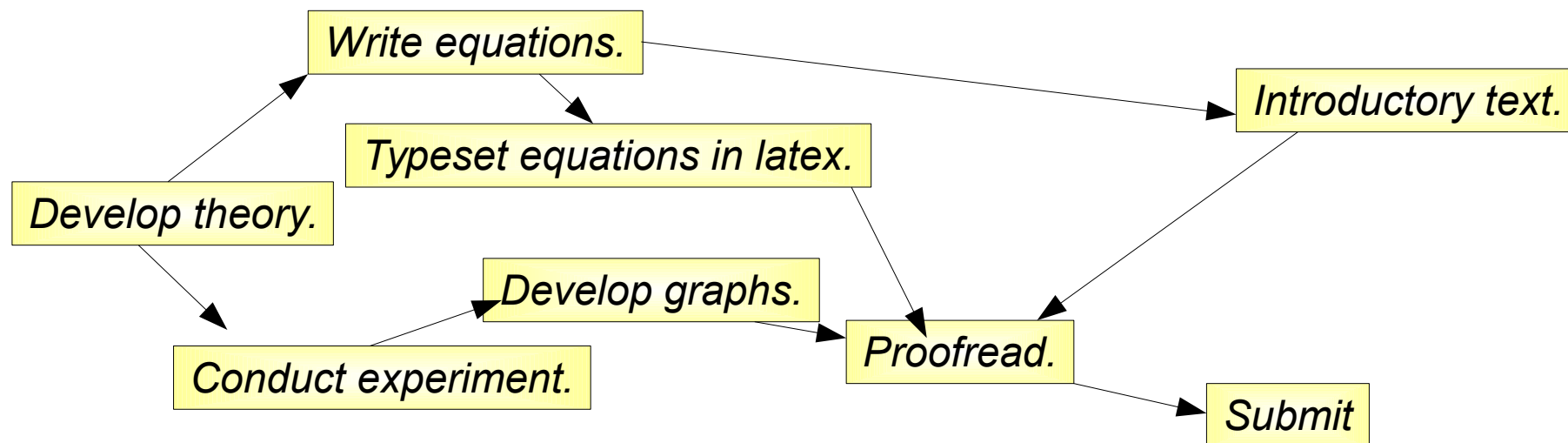
You will share your answer with the class.

E.g.

Albert	**Johannes**	**Enrico**
Theory.	Practical work.	Research.
Creative drafting.	Proofreading.	Formatting.
Graphics.	Coordination.	Rewriting.

Sub-goal identification exercise

As a group, identify some tasks into which you can divide your next team assignment.

You will share your answer with the class.

E.g.

Write equations. → *Typeset equations in latex.*
Develop theory. → *Write equations.*
Develop theory. → *Conduct experiment.*
Write equations. → *Introductory text.*
Typeset equations in latex. → *Proofread.*
Conduct experiment. → *Develop graphs.*
Develop graphs. → *Proofread.*
Introductory text. → *Proofread.*
Proofread. → *Submit*

Simple deliverables exercise

As a group, match up tasks to team members and assign a difficulty/time commitment to each task.

You will share your answer with the class.

E.g.

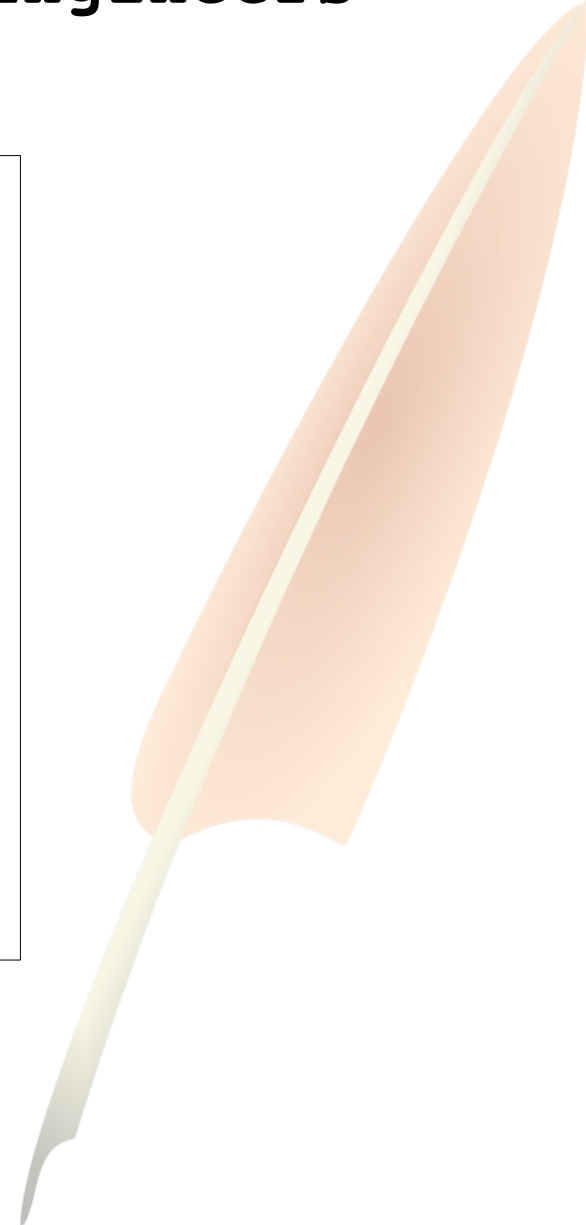| Task	Responsible	Expected commitment
Develop protocol	Enrico	8 hours
Government sign-off	Isaac	6 hours
Report template	Isaac	5 hours
Arrange participants	Enrico	6 hours
Site setup	Enrico	14 hours
Results section	Isaac, Enrico	7 hours
Collect fissile material	Albert	1050 hours, $150,000
Conclusions	Isaac, Enrico	3 hours

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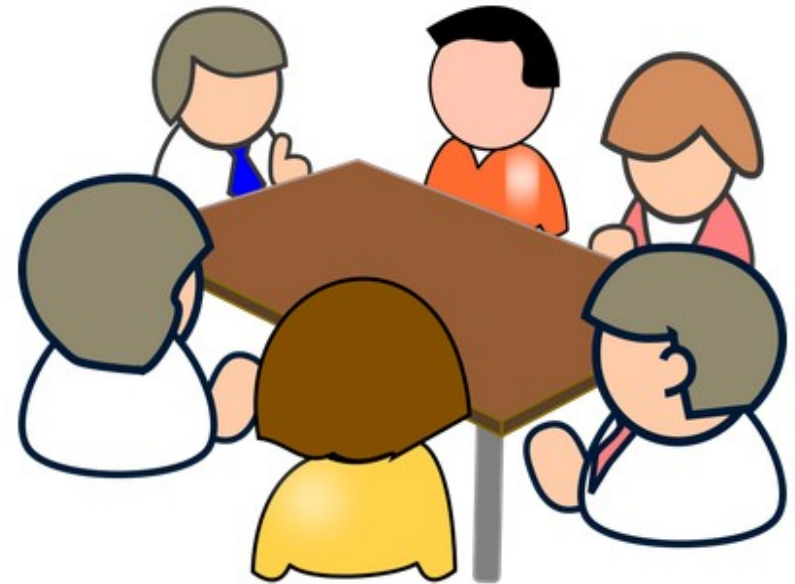- General tips.

Possible phases in a writing project

Phase	Group orientation
Brainstorming, sharing, informal discussions.	Together.
Audience analysis, problem analysis.	Separate/together.
Establish high-level principles (argument, approach).	Separate+together.
Planning.	Together.
Design.	Separate/together.
Rough text pieces.	Separate.
Rough drafts.	Separate/together.
Revisions.	Separate/together.
Content changes.	Separate/together.
Revisions...	Separate/together.
Proofreading.	Separate/together.
Revisions.	Separate/together.

Planning sessions

- Outcome-related:

  - Agreeing on outcome.

  - Assigning deliverables.

  - Arranging next meeting.

  - Developing schedule.

- Content-related:

  - Brainstorming.

  - Sharing ideas.

  - Finding agreement.

- Relationship-related:

  - Learning about each other.

  - Finding common values.

  - Generating shared commitments.

https://openclipart.org/detail/99271/meeting-by-yves_guillou

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Questions to the class

- When is your group scheduled to meet next?

- Who is currently assigned to what task?

- What is your current schedule?
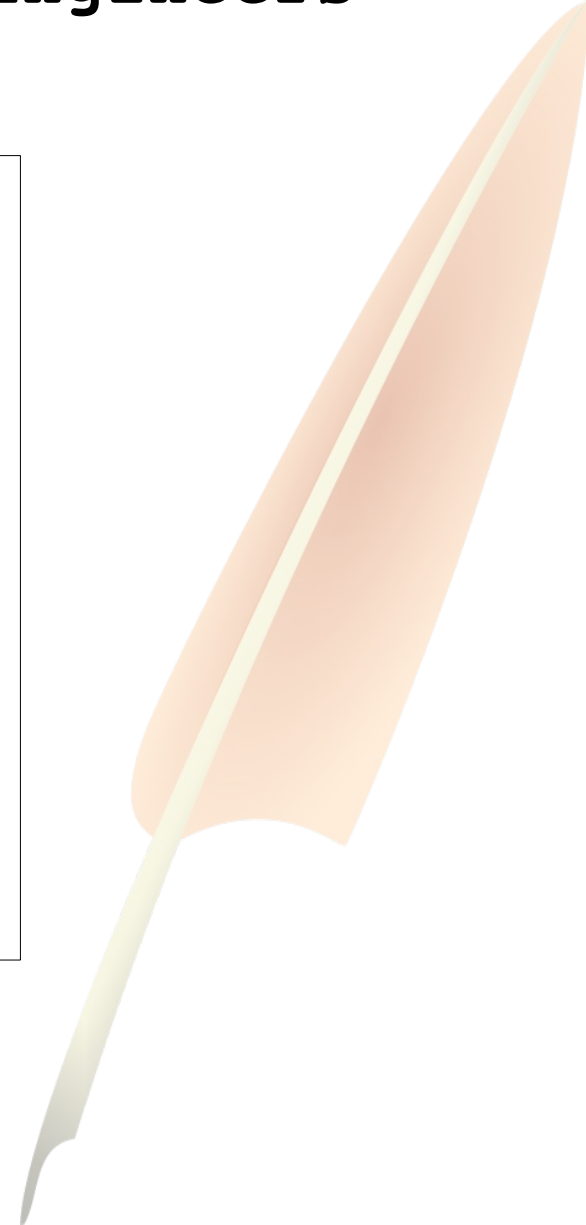
- What will your final proposal look like?

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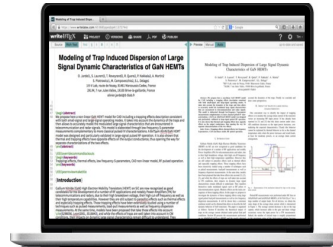- Collaborative editing software.
- General tips.

Collaborative editing software

- Online collaborative latex editors:

  - https://www.sharelatex.com/

  - https://www.writelatex.com/

- Google docs.

  - http://docs.google.com/

- Desktop file-sharing:

  - https://spideroak.com/

  - http://dropbox.com/

- Use a wiki:

  - https://wikispaces.com

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Collaborative editing software

- Version control management software:

  http://en.wikibooks.org/wiki/LaTeX/Collaborative_Writing_of_LaTeX_Documents

  http://stackoverflow.com/questions/6188780/git-latex-workflow
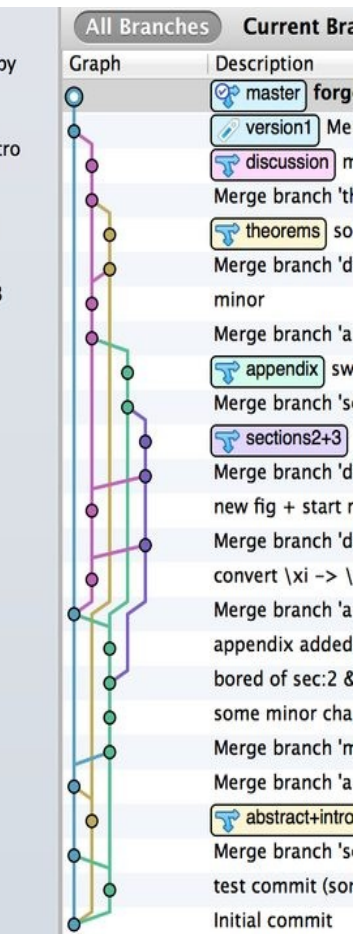
  e.g. SVN, git.

  - All changes tracked.

  - Usually for code.

  - Can be used with Office documents:

    https://git.wiki.kernel.org/index.php
    /GitTips#How_to_use_git_to_track_Open
    Document_.28OpenOffice.2C_Koffice.29_
    files.3F

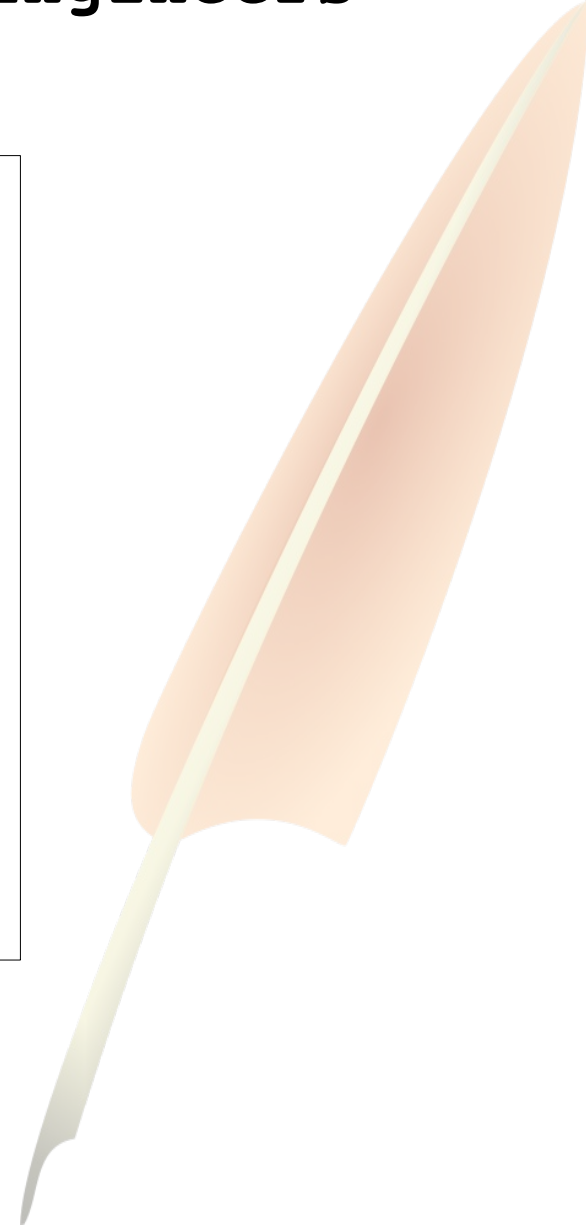 - SVN centralised, git decentralised.

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Final advice

- Importance of respectful attitude.

  - 3 smart people hating each other?

  - 3 smart people working together?

- Start early!

  - Revision process takes time.

  - Individual schedules change.

  - The hardest obstacle is starting.

Final advice

- Work out plan & expectations.

  - Clarification helps respect.

  - A plan is a starting point, even if not followed.

- Do multiple drafts.

  - Otherwise, result can be very messy.

  - A way for everyone to help.

- **Writing separate sections can lead to disarray**.

Reading

See also: University of North Carolina College of Arts and Sciences Writing Center *Group Writing Handout*.

https://writingcenter.unc.edu/handouts/group-writing/

Or try the internet:

DuckDuckGo

working in a team