CS 295B/CS 395B Systems for Knowledge Discovery

Lecture 1:

Course Introduction

The University of Vermont

Outline for today

- High-level tour of the topics
- What does it mean that we will cover “research methods”?
- Tour of the syllabus
- What to expect this week

Outline for today

- **High-level tour of the topics**
- What does it mean that we will cover “research methods”?
- Tour of the syllabus
- What to expect this week

Outline for today

- High-level tour of the topics
- **What does it mean that we will cover “research methods”?**
- Tour of the syllabus
- What to expect this week

Outline for today

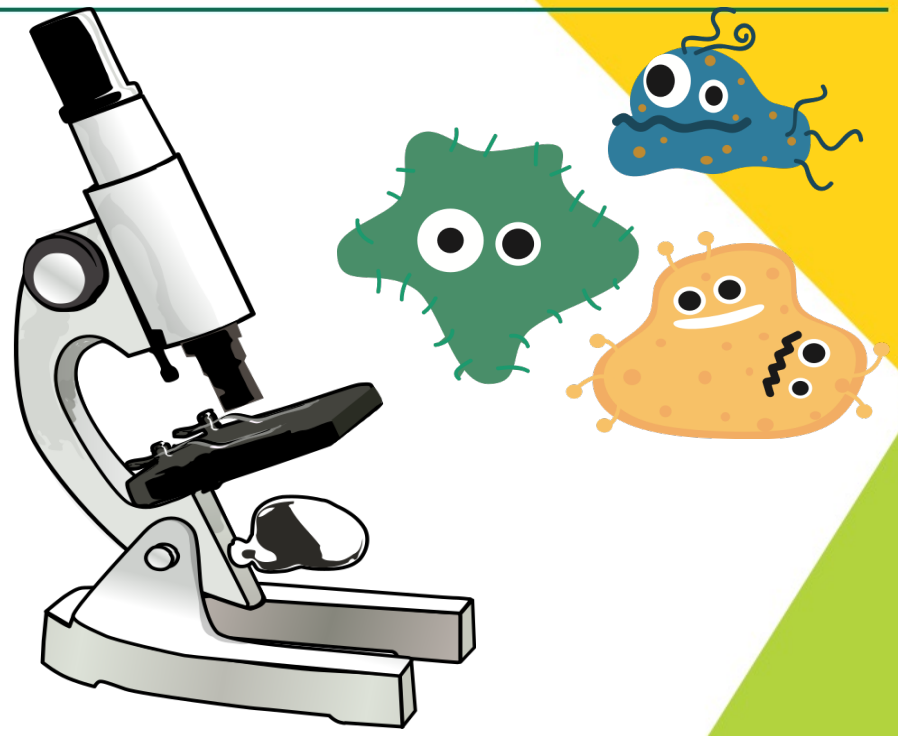
- High-level tour of the topics
- What does it mean that we will cover “research methods”?
- **Tour of the syllabus**
- What to expect this week

Outline for today

- High-level tour of the topics
- What does it mean that we will cover “research methods”?
- Tour of the syllabus
- **What to expect this week**

High-level tour of the topics

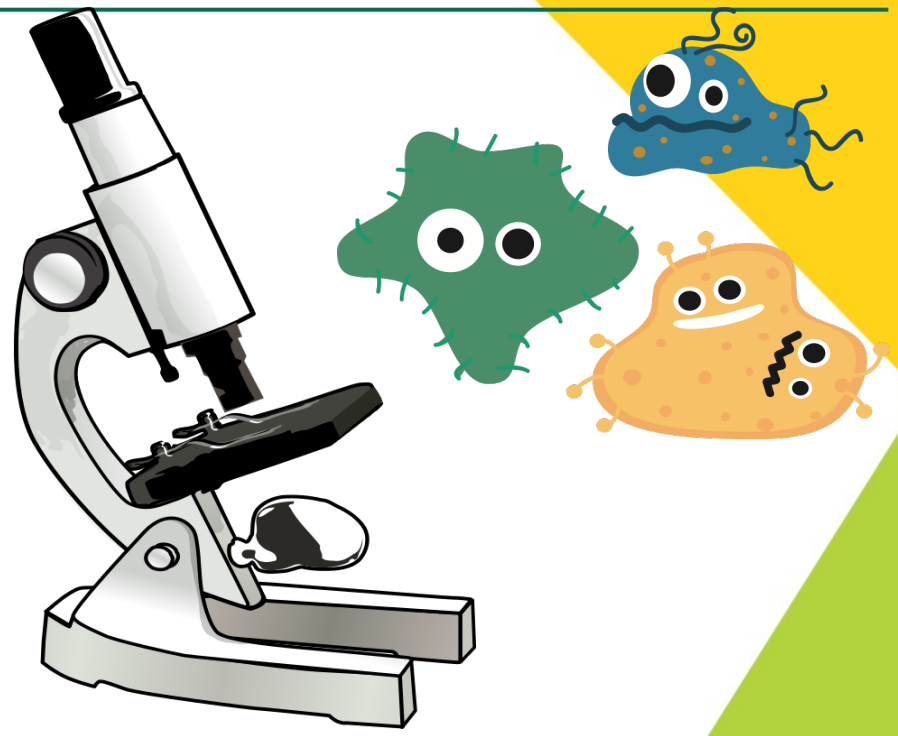
High-level tour of the topics



Monday preview:

- KDD = “Knowledge Discovery in Databases”
- KDD subsumed by “data science”
- *I will not be teaching data analytics, data science, nor data mining in this course. Instead we will focus on tool support for these tasks and discuss how to design and augment existing systems, specifically for data collection tasks.*

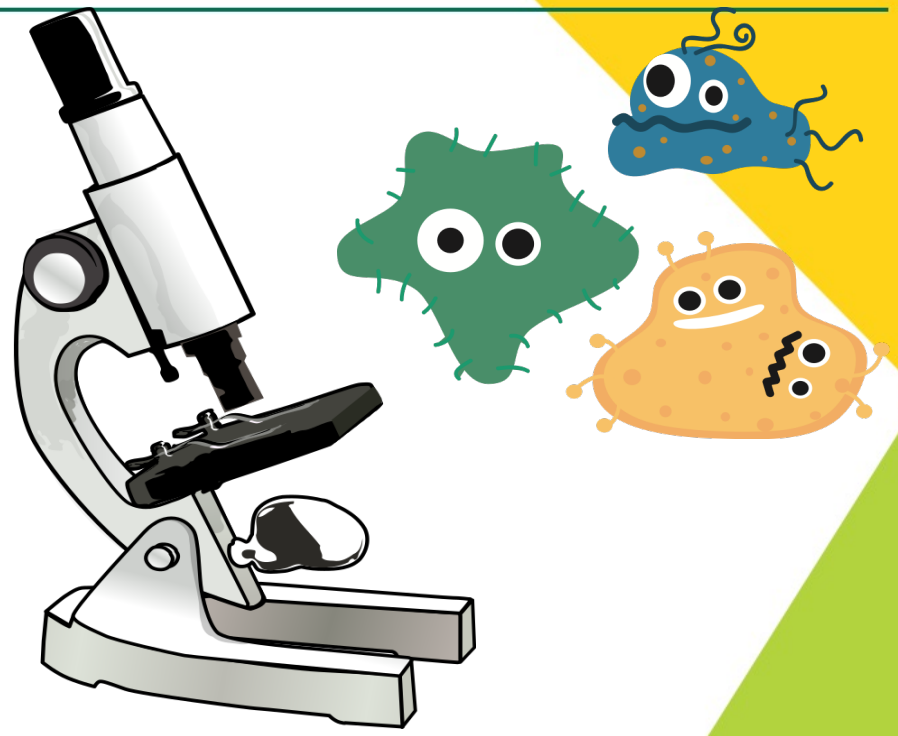
High-level tour of the topics



Monday preview:

- **KDD = "Knowledge Discovery in Databases"**
- KDD subsumed by "data science"
- *I will not be teaching data analytics, data science, nor data mining in this course. Instead we will focus on tool support for these tasks and discuss how to design and augment existing systems, specifically for data collection tasks.*

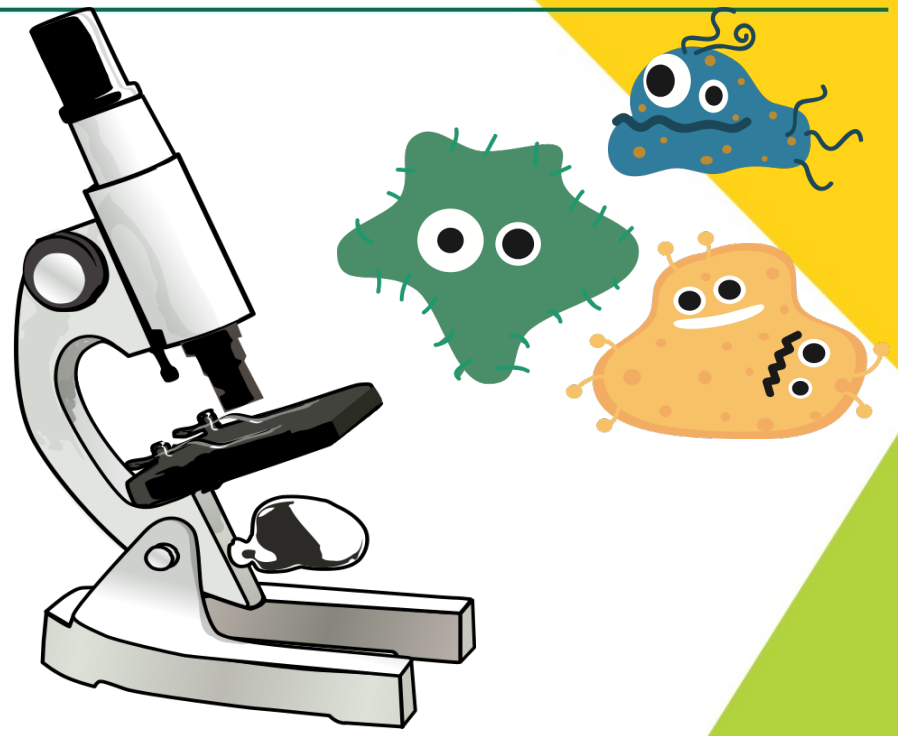
High-level tour of the topics



Monday preview:

- KDD = "Knowledge Discovery in Databases"
- **KDD subsumed by "data science"**
- *I will not be teaching data analytics, data science, nor data mining in this course. Instead we will focus on tool support for these tasks and discuss how to design and augment existing systems, specifically for data collection tasks.*

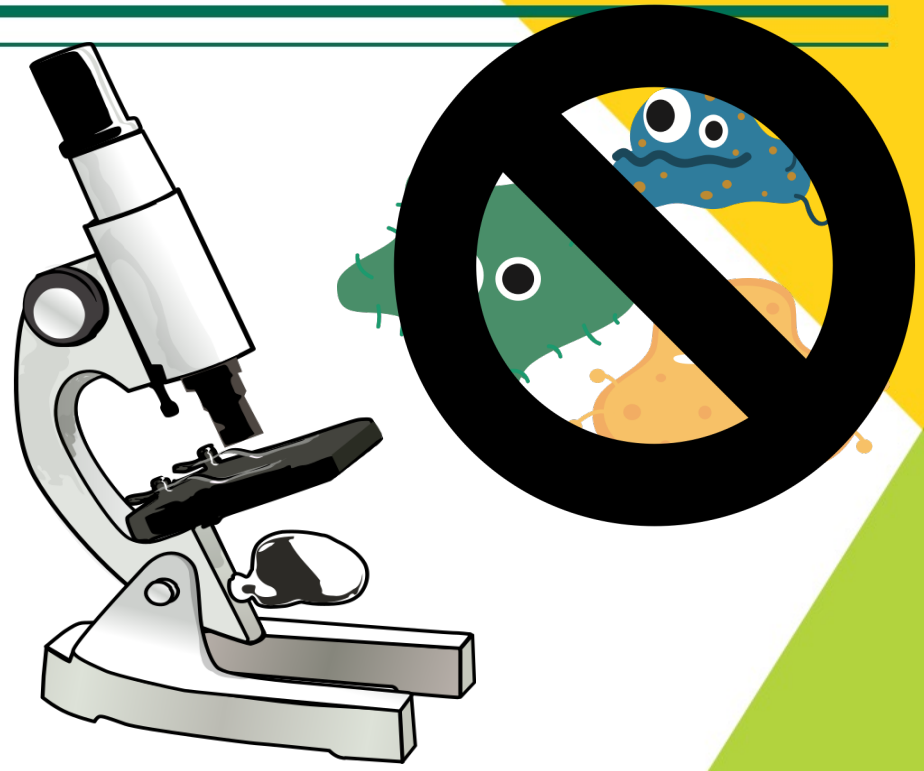
High-level tour of the topics



Monday preview:

- KDD = "Knowledge Discovery in Databases"
- KDD subsumed by "data science"
- *I will **not** be teaching data analytics, **data science**, nor data mining in this course. **Instead** we will focus on **tool support** for these tasks and discuss how to design and augment existing systems, specifically for **data collection** tasks.*

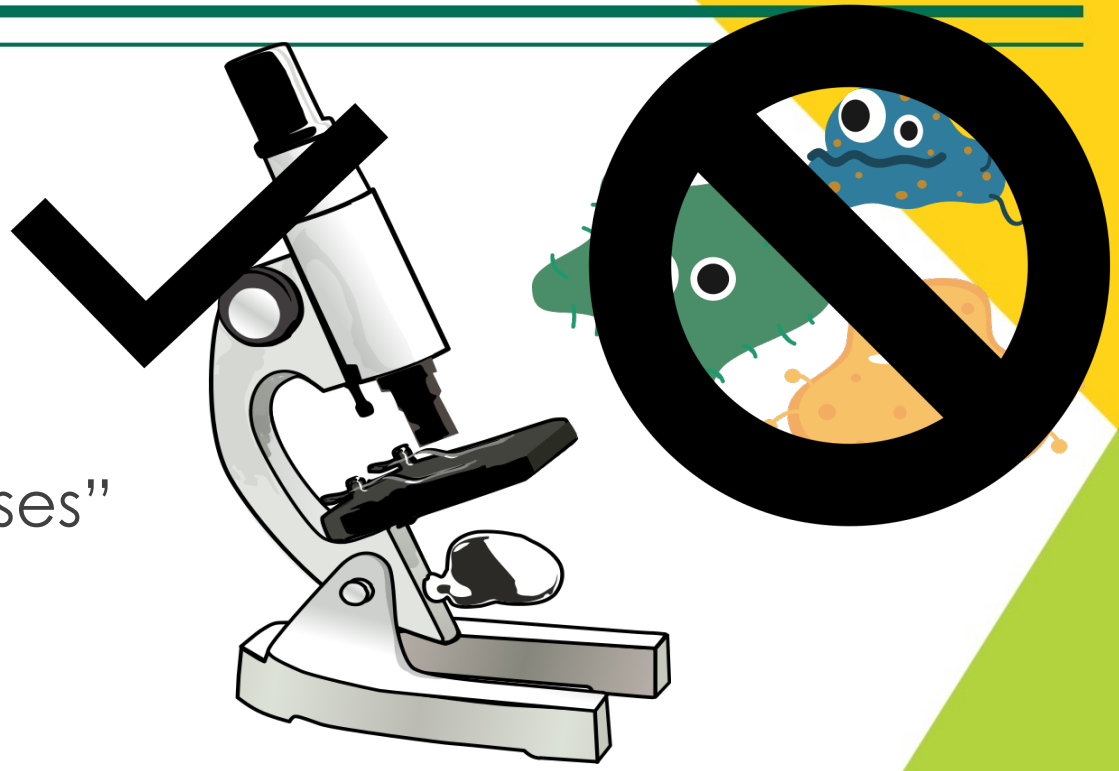
High-level tour of the topics



Monday preview:

- KDD = "Knowledge Discovery in Databases"
- KDD subsumed by "data science"
- *I will **not** be teaching data analytics, **data science**, nor data mining in this course. **Instead** we will focus on **tool support** for these tasks and discuss how to design and augment existing systems, specifically for **data collection** tasks.*

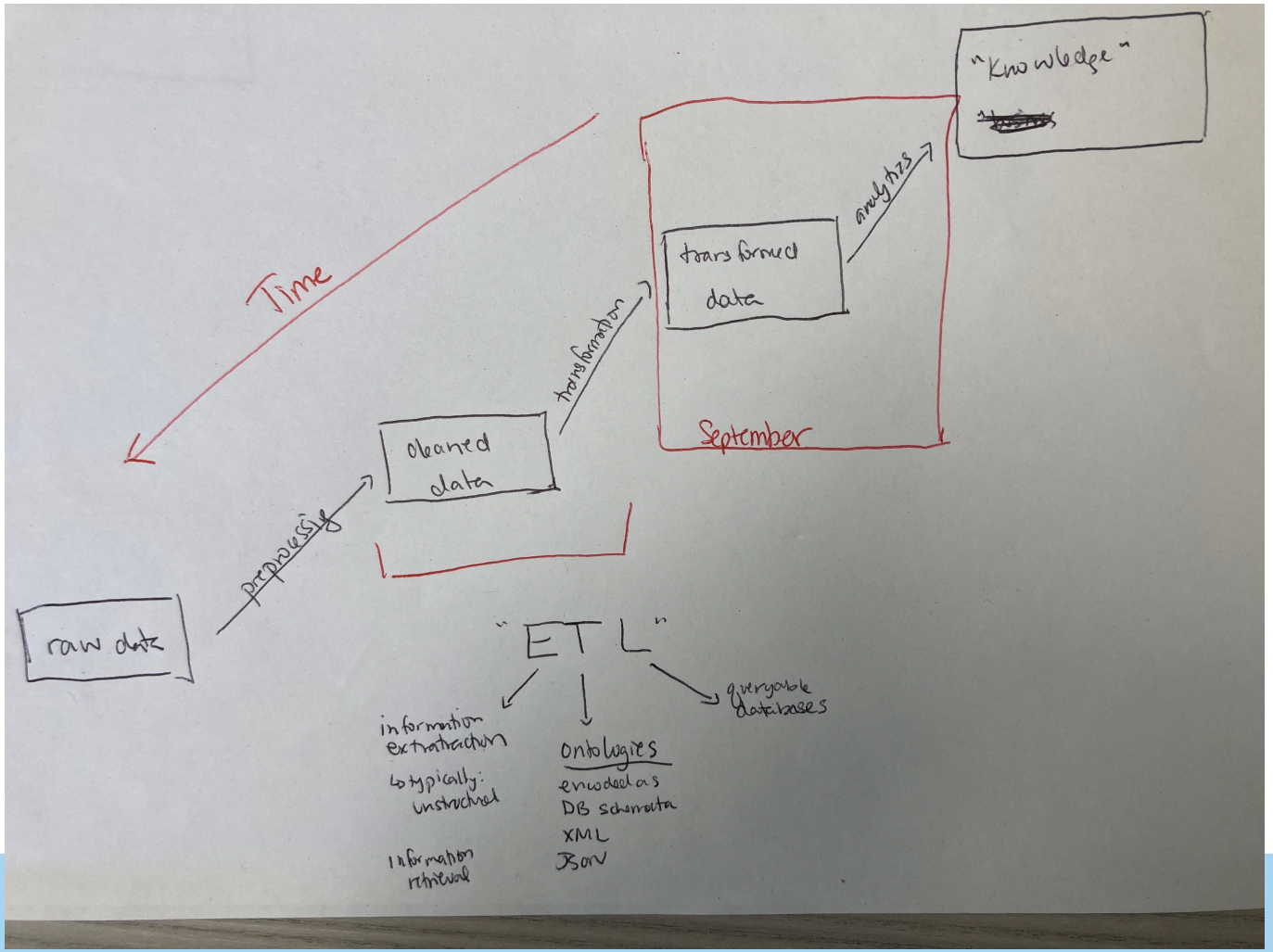
High-level tour of the topics



Monday preview:

- KDD = "Knowledge Discovery in Databases"
- KDD subsumed by "data science"
- *I will **not** be teaching data analytics, **data science**, nor data mining in this course. **Instead** we will focus on **tool support** for these tasks and discuss how to design and augment existing systems, specifically for **data collection** tasks.*

High-level tour of the topics



What does it mean that we will cover “research methods”?

What does it mean that we will cover “research methods”?

Methods := *how* you do <something>

Here, <something> = research in computing

- Tools, techniques, and procedures
- Apply critical framework to existing research
- Use framework to structure your own research

What does it mean that we will cover “research methods”?

Methods := *how* you do <something>

Here, <something> = research in computing

- Tools, techniques, and procedures
- Apply critical framework to existing research
- Use framework to structure your own research

What does it mean that we will cover “research methods”?

Methods := *how* you do <something>

Here, <something> = research in computing

- **Tools, techniques, and procedures**
- Apply critical framework to existing research
- Use framework to structure your own research

What does it mean that we will cover “research methods”?

Methods := *how* you do <something>

Here, <something> = research in computing

- Tools, techniques, and procedures
- **Apply critical framework to existing research**
- Use framework to structure your own research

What does it mean that we will cover “research methods”?

Methods := *how* you do <something>

Here, <something> = research in computing

- Tools, techniques, and procedures
- Apply critical framework to existing research
- **Use framework to structure your own research**

Tour of the Syllabus

Tour of the syllabus

- Reading papers
    - Writing reviews
    - Presenting
    - Scribing (U)
- Final Project (G)

Course Website

Tour of the syllabus

- **Reading papers**
  - Writing reviews
  - Presenting
  - Scribing (U)
- Final Project (G)

- Some will be much harder, very unfamiliar
- Expect to take several hours
- Active reading
- One technique:
  1. Skim for high level ideas and structure
  2. Write down expectations from abstract.
  3. Deeper read: what is each section trying to convey?
  4. Final pass to be critical

Course Website

Tour of the syllabus

- **Reading papers**
  - Writing reviews
  - Presenting
  - Scribing (U)
- Final Project (G)

- **Some will be much harder, very unfamiliar**
- Expect to take several hours
- Active reading
- One technique:
  1. Skim for high level ideas and structure
  2. Write down expectations from abstract.
  3. Deeper read: what is each section trying to convey?
  4. Final pass to be critical

Course Website

Tour of the syllabus

- **Reading papers**
  - Writing reviews
  - Presenting
  - Scribing (U)
- Final Project (G)

- Some will be much harder, very unfamiliar
- **Expect to take several hours**
- **Active reading**
- One technique:
  1. Skim for high level ideas and structure
  2. Write down expectations from abstract.
  3. Deeper read: what is each section trying to convey?
  4. Final pass to be critical

Course Website

Tour of the syllabus

- **Reading papers**
  - Writing reviews
  - Presenting
  - Scribing (U)
- Final Project (G)

- Some will be much harder, very unfamiliar
- Expect to take several hours
- Active reading
- **One technique:**
  1. Skim for high level ideas and structure
  2. Write down expectations from abstract.
  3. Deeper read: what is each section trying to convey?
  4. Final pass to be critical

Course Website

Tour of the syllabus

- Reading papers
  - **Writing reviews**
  - Presenting
  - Scribing (U)
- Final Project (G)

- Mostly will not be true “reviews”
- Template with questions in hotcrp
  - Not every section will be relevant every time, but try
- First reviews due Sep 9
  - Easier papers
  - Get started on Sep 14 papers NOW

Course Website

Tour of the syllabus

- Reading papers
  - **Writing reviews**
  - Presenting
  - Scribing (U)
- Final Project (G)

- **Mostly will not be true "reviews"**
- Template with questions in hotcrp
  - Not every section will be relevant every time, but try
- First reviews due Sep 9
  - Easier papers
  - Get started on Sep 14 papers NOW

Course Website

Tour of the syllabus

- Reading papers
  - **Writing reviews**
  - Presenting
  - Scribing (U)
- Final Project (G)

- Mostly will not be true “reviews”
- **Template with questions in hotcrp**
  - Not every section will be relevant every time, but try
- First reviews due Sep 9
  - Easier papers
  - Get started on Sep 14 papers NOW

Course Website

Tour of the syllabus

- Reading papers
  - **Writing reviews**
  - Presenting
  - Scribing (U)
- Final Project (G)

- Mostly will not be true “reviews”
- Template with questions in hotcrp
  - Not every section will be relevant every time, but try
- **First reviews due Sep 9**
  - Easier papers
  - Get started on Sep 14 papers NOW

Course Website

Tour of the syllabus

- Reading papers
  - Writing reviews
  - **Presenting**
  - Scribing (U)
- Final Project (G)

- Presenters must also review
  - Present “as” author
- Present at least once
  - Determined by bidding
- 20mins, more on Sep 10
- Idea: conference presentation
  - Doesn’t have to be…

Course Website

Tour of the syllabus

- Reading papers
  - Writing reviews
  - **Presenting**
  - Scribing (U)
- Final Project (G)

- **Presenters must also review**
  - Present “as” author
- Present at least once
  - Determined by bidding
- 20mins, more on Sep 10
- Idea: conference presentation
  - Doesn’t have to be…

Course Website

Tour of the syllabus

- Reading papers
  - Writing reviews
  - **Presenting**
  - Scribing (U)
- Final Project (G)

- Presenters must also review
  - Present “as” author
- **Present at least once**
  - Determined by bidding
- 20mins, more on Sep 10
- Idea: conference presentation
  - Doesn’t have to be…

Course Website

Tour of the syllabus

- Reading papers
  - Writing reviews
  - **Presenting**
  - Scribing (U)
- Final Project (G)

- Presenters must also review
  - Present “as” author
- Present at least once
  - Determined by bidding
- **20mins, more on Sep 10**
- Idea: conference presentation
  - Doesn’t have to be…

Course Website

Tour of the syllabus

- Reading papers
  - Writing reviews
  - **Presenting**
  - Scribing (U)
- Final Project (G)

- Presenters must also review
  - Present “as” author
- Present at least once
  - Determined by bidding
- 20mins, more on Sep 10
- **Idea: conference presentation**
  - Doesn’t have to be…

Course Website

Tour of the syllabus

- Reading papers
  - Writing reviews
  - Presenting
  - **Scribing (U)**
- Final Project (G)

- Ugrad only
  - Details on course website
  - Lectures or project workshops
- First opportunity: next class (Wed.)
  - Draft due Wed. night
  - Revision due Thurs. night
- Logistics

Course Website

Tour of the syllabus

- Reading papers
  - Writing reviews
  - Presenting
  - **Scribing (U)**
- Final Project (G)

- **Ugrad only**
  - Details on course website
  - Lectures or project workshops
- First opportunity: next class (Wed.)
  - Draft due Wed. night
  - Revision due Thurs. night
- Logistics

Course Website

Tour of the syllabus

- Reading papers
  - Writing reviews
  - Presenting
  - **Scribing (U)**
- Final Project (G)

- Ugrad only
  - Details on course website
  - Lectures or project workshops
- **First opportunity: next class (Wed.)**
  - Draft due Wed. night
  - Revision due Thurs. night
- Logistics

Course Website

Tour of the syllabus

- Reading papers
  - Writing reviews
  - Presenting
  - **Scribing (U)**
- Final Project (G)

- Ugrad only
  - Details on course website
  - Lectures or project workshops
- First opportunity: next class (Wed.)
  - Draft due Wed. night
  - Revision due Thurs. night
- **Logistics**

Course Website

Tour of the syllabus

- Reading papers
  - Writing reviews
  - Presenting
  - Scribing (U)
- **Final Project (G)**
  - Grad mandatory
    - Ugrad optional (join)
  - Purpose: research
  - Topic: provided or proposed
  - Important dates
    - Details: Sep 17
    - Proposals due Sep 24
    - Short presentations Oct 1

Course Website

Tour of the syllabus

- Reading papers
  - Writing reviews
  - Presenting
  - Scribing (U)
- **Final Project (G)**
  - **Grad mandatory**
    - Ugrad optional (join)
  - Purpose: research
  - Topic: provided or proposed
  - Important dates
    - Details: Sep 17
    - Proposals due Sep 24
    - Short presentations Oct 1

Course Website

Tour of the syllabus

- Reading papers
  - Writing reviews
  - Presenting
  - Scribing (U)
- **Final Project (G)**
  - Grad mandatory
    - Ugrad optional (join)
  - **Purpose: research**
  - Topic: provided or proposed
  - Important dates
    - Details: Sep 17
    - Proposals due Sep 24
    - Short presentations Oct 1

Course Website

Tour of the syllabus

- Reading papers
  - Writing reviews
  - Presenting
  - Scribing (U)
- **Final Project (G)**

- Grad mandatory
  - Ugrad optional (join)
- Purpose: research
- **Topic: provided or proposed**
- Important dates
  - Details: Sep 17
  - Proposals due Sep 24
  - Short presentations Oct 1

Course Website

Tour of the syllabus

- Reading papers
  - Writing reviews
  - Presenting
  - Scribing (U)
- **Final Project (G)**
  - Grad mandatory
    - Ugrad optional (join)
  - Purpose: research
  - Topic: provided or proposed
  - **Important dates**
    - Details: Sep 17
    - Proposals due Sep 24
    - Short presentations Oct 1

Course Website

How you will be graded

Undergraduate

- Points-based
  - 3 pts/review (>= 22 reviews)
  - 3 pts/notes (>= 22 scribable lectures)
  - 10 pts/presentation
- Joining a project → A+
  - Want to do an independent project?
    - Come talk to me

Graduate

- Be a good citizen
- Don't make me count points
  - Syllabus → If you do…
- Ideally: I will let you know when you're not getting an A
- Course not suitable for quals

How you will be graded

Undergraduate

- **Points-based**
  - 3 pts/review (>= 22 reviews)
  - 3 pts/notes (>= 22 scribable lectures)
  - 10 pts/presentation
- Joining a project → A+
  - Want to do an independent project?
    - Come talk to me

Graduate

- Be a good citizen
- Don't make me count points
  - Syllabus → If you do…
- Ideally: I will let you know when you're not getting an A
- Course not suitable for quals

How you will be graded

Undergraduate

- Points-based
  - 3 pts/review (>= 22 reviews)
  - 3 pts/notes (>= 22 scribable lectures)
  - 10 pts/presentation
- **Joining a project → A+**
  - Want to do an independent project?
    - Come talk to me

Graduate

- Be a good citizen
- Don't make me count points
  - Syllabus → If you do…
- Ideally: I will let you know when you're not getting an A
- Course not suitable for quals

How you will be graded

Undergraduate

- Points-based
  - 3 pts/review (>= 22 reviews)
  - 3 pts/notes (>= 22 scribable lectures)
  - 10 pts/presentation
- Joining a project → A+
  - Want to do an independent project?
    - Come talk to me

Graduate

- **Be a good citizen**
- Don't make me count points
  - Syllabus → If you do…
- Ideally: I will let you know when you're not getting an A
- Course not suitable for quals

How you will be graded

Undergraduate

- Points-based
  - 3 pts/review (>= 22 reviews)
  - 3 pts/notes (>= 22 scribable lectures)
  - 10 pts/presentation
- Joining a project → A+
  - Want to do an independent project?
    - Come talk to me

Graduate

- Be a good citizen
- **Don't make me count points**
  - Syllabus → If you do…
- Ideally: I will let you know when you're not getting an A
- Course not suitable for quals

How you will be graded

Undergraduate

- Points-based
  - 3 pts/review (>= 22 reviews)
  - 3 pts/notes (>= 22 scribable lectures)
  - 10 pts/presentation
- Joining a project → A+
  - Want to do an independent project?
    - Come talk to me

Graduate

- Be a good citizen
- Don't make me count points
  - Syllabus → If you do…
- **Ideally: I will let you know when you're not getting an A**
- Course not suitable for quals

How you will be graded

Undergraduate

- Points-based
  - 3 pts/review (>= 22 reviews)
  - 3 pts/notes (>= 22 scribable lectures)
  - 10 pts/presentation
- Joining a project → A+
  - Want to do an independent project?
    - Come talk to me

Graduate

- Be a good citizen
- Don't make me count points
  - Syllabus → If you do…
- Ideally: I will let you know when you're not getting an A
- **Course not suitable for quals**

What to expect this week

- **Wednesday: Research Methods Basics**
    - *Up to two undergraduates may scribe*
- **Friday: CS Research Day**
    - Attend and try to apply Wednesday's framework
    - We will meet up here and move outside for lunch to discuss

Nothing due this week.