Senior Thesis/Project: We’ll get you there
Types of Thesis Research
The Thesis/Project Proposal

Professor Gordon Wyse, Biology
and CHC Thesis Coordinator
What sorts of research are suitable for a thesis or project?

What is a thesis and what is a project?

The process and the timeline
How do you select a topic for thesis/project research?

- In the sciences the research often involves your collecting your own data (lab or field)
- But not necessarily
- Most often you and your advisor select a topic together
- “Here are three projects going on in my lab. In which of these areas would you like to work?”

- In the humanities and social sciences, research is usually literature-based
- Most often you and your advisor select a topic together
- Literature-based topics have more room for student initiative
- Performance-based projects: produce a concert, play, dance performance, workshop
Shakespeare’s Richard III and Tudor revisionist history

Richard III
How he gave battle in vain

THE EXCAVATION

Leicestershire car park where the skeleton was found last September.

THE SKULL

"That bottled spider, that foul bunchy-back'd trout!"

Scars to the cheek infliction inflicted after death or after being hanged.

"One of the Welshmen then came after him, and struck him dead with a halberd, and another took his body and put it before him on his horse and carried it, hair hanging as one would hear a sheep."

French poet, Jean Molinet’s account of the Battle of Bosworth claimed Richard was killed by a blow to the head.

Possibly fatal wound, most likely caused by a halberd or poleaxe, below.

THE SKELETON

"See how I am bewitch'd! behold mine arm, is, like a blasted sapling, wither'd up."

Despite Shakespeare’s portrayal, the real Richard was strong enough to lead men into battle and did not have a withered arm.

"Killed the boar, he shewed his head."

Gustavus Adolphus, Welsh poet, described the death of the "boar" which referred to the king’s standard and possibly the demonstration of his body. The body shows signs of being dismembered through the buttock after death.

THE DESCEDANT

Michael Iren was suspected to be Richard’s descendant, as he was a 17th-century friend of the real Edward, English king who reigned before him. His DNA was checked to establish this theory.
You could write a new play based on old characters...

On the RISE

Shakespeare gave her nearly 900 lines in four of his plays, but it took Real Live Theatre to make Queen Margaret of Anjou a royal star

By BEATRICE ANN GENCIO
For the Gazette

Most people can name at least one female character in a Shakespeare play: Juliet, Ophelia, Lady Macbeth... but few will come up with Margaret.

And yet, says Dan Morbyrne, 37, of Holyoke, co-founder of Real Live Theatre and co-creator of a new play about Margaret, she is the most compelling of all Shakespeare's female characters.

But, who is she?

She is Queen Margaret of Anjou — the French wife of Britain's King Henry VI and, therefore, a 15th-century queen of England.

Margaret is mentioned in four of Shakespeare's plays ("Henry VI," parts 1-3, and "Richard III") and, in those combined, speaks in the neighborhood of 649 lines.

"When you take her role... in four different plays and extract it, she becomes the largest character with the most lines, but not a lot of people know about her — she is buried," Morbyrne said. And though she makes multiple appearances in Shakespeare's works, he adds, her character is poorly developed.

Organizers at Real Live Theatre in Easthampton say they hope to rectify that when they present their new play, "The Life and Death of Queen Margaret" Friday through Sunday at the...
Interested in Long QT Syndrome?

Monophasic Action Potential (Cardiac Muscle Cell)

- Phase 0, $\text{Na}^+$ enters the cell, Depolarization
- Phase 2, $\text{Ca}^{++}$ enters the cell, Initiation of contraction
- Phase 3, $\text{K}^+$ exits the cell, Repolarization

+ 10 mV

- 90 mV

Depolarization ———— Repolarization

Resting Potential
Animal navigation using magnetic sensory information
Economics: The “Chicago Boys” and the Pinochet regime in Chile

- Pinochet replaced Allende in a 1973 revolution
- His economists from the Chicago School privatized much of the economy
- Niall Ferguson (*The Ascent of Money*) argued that privatization of pensions led to the end of inflation and lasting economic reforms.

- Naomi Klein (*The Shock Doctrine*) disagreed:
  - “Chile is still being held up by free-market enthusiasts as proof that Friedmanism works.
  - The country’s period of steady growth...did not begin until the mid-eighties—a full decade after the Chicago Boys implemented shock therapy and well after Pinochet was forced to make a radical course correction.”
Gerrymanders: racial and political

C. Igraham, Washington Post, 5/15/2014
Other ideas for thesis or project

- A concert of chamber music inspired by birdsong (project)
- Approaches to the reform of health care delivery
- Russian interventions in U.S. elections
- What went wrong in the 1947 partition of India?
- Artificial sweeteners
- Religious imagery in the poetry of T.S. Eliot and Bob Dylan
- Is beta amyloid the primary lesion in Alzheimer’s disease?
- Politics, water, and public health in sub-Saharan Africa
- Write a hip-hop musical about Alexander Hamilton... Wait—that’s been done.
Questions about part 1?

What ideas do you have for the germ of a topic area?
Proposal for Individually Contracted option?

- Source: [https://www.honors.umass.edu/capstone-experience-independent-capstone-proposal](https://www.honors.umass.edu/capstone-experience-independent-capstone-proposal)

- Basics: A proposal is required for each semester of the thesis or project (499Y and/or 499T/P) that is individually contracted.

- Both semester proposals have to be submitted on PATHS and approved by the faculty sponsor, the department Honors Program Director and the CHC Academic Standards Committee.
Deadlines for proposal submission on PATHS

- For Fall 2019 semester the deadline for student submissions is August 15\(^{th}\).

The deadline for all faculty approvals, including the faculty sponsor, the HPD and approval for a credit overload, are due on PATHS by midnight on the first Thursday of class, or September 5\(^{th}\).

However, students are strongly encouraged to work with the faculty sponsor this semester and submit a proposal before the end of the Spring 2019 semester. This will avoid delays in approvals and registration in September.
Thesis or project proposal part 1: Contents

- Statement of the goal of the thesis or project
- Key readings
- Communication with the committee chair
- Specialized training (especially human/animal subjects training)
- Methodology

If the research is only starting later in the 499Y semester, the part 1 proposal must contain a deadline by which a methodology will be established. The methodology then must be in the part 2 proposal (499T/499P).
Thesis or project proposal part 1: Contents

- **Timeline**: deadline dates and specific expectations for assignments and selection of a second committee member
- Include date of submission of 499T/P proposal by the end of the fall semester.
Thesis or project proposal part 2: Contents

- Use the following sub-headings for the proposal submitted on PATHS (more on the specifics of these sections in future workshops)

Introduction: What are you researching and why

Review of the literature: What have others written/published on your topic?

Methodology: How are you conducting your research?
Thesis or project proposal part 2: Contents

- **Evaluation:** How will the work be evaluated and graded?

- **Communication:** Be specific about the expectations concerning meetings with committee chair and other member(s).

- **Timeline:** Dates and expectations for review of research and specific deadlines for first draft, second draft, final completed manuscript and artifact
Thesis or project proposal part 2: Deadlines

- The deadline for the part 2 student submission on PATHS is the end of the Fall 2019 semester (December 22 is the last day of final exams).

- The deadline on PATHS for the faculty approvals and approval for credit overload if necessary is midnight on the Thursday of the first week of classes in the Spring 2020 semester (January 25, 2020)
Thesis or project proposal in a seminar format

- The proposal will be completed in the first semester of the typical two semester thesis seminar.

- The topics to be covered in the proposal are similar to those for the independent study format for the thesis.

- However, the specifics will be determined by the faculty member teaching each seminar.
Thesis or project proposal in a seminar format

- Note that a thesis seminar is a course that you sign up for in SPIRE. PATHS is not used for the thesis or project done in the seminar format.

- The specific deadlines for work in the seminar are determined by the faculty member teaching the seminar.

- The final product of the seminar in the Fall 2019 semester is a full proposal for the thesis or project.