INFM Senior Project Guidelines

Description

In the form of an autonomous individual or collaborative project, the Integrative Informatics ("Informatics") Thesis Project provides access to resources, advising, mentorship, and dedicated time toward developing a senior thesis project ("Comp"), a requirement for graduation.

This project, developed in consultation with Informatics faculty, should represent a "capstone" outcome for student work in the Informatics program; the work should be motivated by and demonstrate -- at minimum -- the following learning outcomes:

- engagement with data and/or systems of data production to reveal underlying patterns, narratives, or trends, resulting in an original scholarly argument
- incorporation of one or more interdisciplinary perspectives to explain or represent these patterns, narratives, or trends
- critical understanding of contemporary and historical contexts that exert influence on the specific subjects under examination
- critical understanding of how specific subjects under examination exert influence on contemporary culture
- the ability to present and communicate the process, procedures, and outcomes of the Comp project in a variety of media including, but not limited to, oral presentation, written long-form document, mediated formats (such as videos), installations, or conference proceedings

Close collaboration with faculty assigned as readers on a project, along with early and earnest work to define research areas, will prove essential in achieving the above-stated goals. To expedite and assist in project definition and creation, the Informatics faculty offers this document to provide guidelines and requirements for Informatics Comp projects.

This document is issued as a part of INFM 600 and 610, which Informatics students complete during the fall and spring semesters of their final year, respectively. Students should use this time and this document to clarify and structure their work toward completion of an Informatics Comp project.

Requirements

The faculty understands that work in Informatics can often defy static or traditional research presentation formats. As such, the list below contemplates only a limited set of potential final forms. Faculty may advise students completing a Comp project to pursue alternatives for final project realization.

Given the nature of projects to vary widely in scope and outcome, the following list establishes only foundational requirements upon which students are invited to innovate, expand, or append:

- a proposal written to satisfy Informatics faculty that a project is well-grounded in the literature and methods of a single or multiple given discipline(s) submitted as a final deliverable of INFM 600 which:
 - includes an annotated bibliography of sources consulted and cited
- a thesis document comprised of chapters including:
 - o an introduction, which provides
 - motivations for pursuing the work completed
 - situation of the project in larger disciplinary and historical contexts
 - an orientation to the various deliverables and structure of the project
 - review of the research-grounded process pursued in realizing the final form of the project, providing rationale for decisions made
 - detailed discussion of the implications of the results of this process and their impact *vis-a-vis* the critical conversation in which the work participates
 - evidence-rooted speculation about future work motivated or necessitated by the final outcome
 - bibliographies of all sources consulted and cited throughout the project in both final and draft forms
- a final deliverable created in project-specific form which displays students' abilities to design and implement a public-facing engagement with the underlying details of the project completed
 - as the form of this instrument is highly project-dependent, this requirement should be defined in consultation with readers and appropriate project advisors or mentors

Informatics faculty will also issue short assignments throughout this process. The goal of these assignments is to provide accountability for and enhance the quality of the process underpinning the Comp project. While these assignments are not explicitly included in the above deliverables, their influence is implicit in the quality of the above minimum requirements. Student participation in and completion of these assignments is crucial for community success.

In addition, Informatics faculty may refer students to Comp guidelines governed by the extra- or interdisciplinary fields on which a project is contingent. In these cases, relevant discipline-specific guidance may supplement or alter requirements, though not replace them. Examples of this may include citation formats or standards of evidence which are discipline-specific.

Interdisciplinary Comp projects

In the event of an interdisciplinary Comp governed by readers in two departments (i.e. a "double major"), Informatics students completing their Comp are required to develop a Memorandum of Understanding (MoU) on which all readers must agree.

This document should contain, but not be limited to:

- Clear definition of the proposed project, outcomes, and deliverables
- Mandatory departmental or disciplinary requirements for any deliverables
- Expectations of advisory meetings or consultation
- Reconciliation of any guidelines which conflict
- Submission and defense schedules which accommodate departmental requirements

Multiple-participant projects (Collaborative Comp)

Given that the methods and approaches of Informatics projects are interdisciplinary by nature, students may choose to complete a collaborative Comp rather than individual projects. While this choice does not change the material requirements of the Informatics Comp, the following dimensions supplement established project guidelines for students choosing this pathway:

General project guidelines

- students may elect to work in collaborations approved by Informatics faculty
- these collaborations must consist of no more than two (2) scholars focusing on the same discipline
 - They must develop, complete, and sign a contract outlining responsibilities and expectations governing collaboration
- all product and process deliverables must clearly represent the efforts of all collaborative members; failure to do so may adversely impact evaluation

Deliverable-specific guidelines

- proposal and thesis documents must contain sections describing the impact or influence of specific disciplines in addition to a holistic, broad summary of combined methods and approaches
- bibliographies must be organized to emphasize disciplinary contributions to the final project
 - this may take one of several forms including by subject area, topic, or another determined in consultation with readers

 the final deliverables (including those which are public-facing) must demonstrate clear influence of all disciplines beyond collaborative member naming and attribution

Institutional Review Board (IRB)

Students whose projects engage in human subjects research as defined by the IRB includes:

- systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge, which
- involves data collected from humans

must complete a first draft of the IRB Proposal Form and present it to their First Reader by **1 November**. This ensures that submission, revision, and ultimate approval will assist -- rather than impede -- project development and completion.

Statement on Community Engagement

The Informatics faculty recognize that many Informatics Comp projects will engage the community. Where possible, the Informatics faculty encourages all students completing projects to understand the ways in which their work might interface with the larger Meadville and/or Northwest Pennsylvania regional community.

These connections should be discussed with all of Readers early in the project to secure the participation and cooperation of groups which may benefit from your research. More than ever, Allegheny College has resources which can assist you in integrating research projects with new or ongoing community efforts.

Exceptions

Given the broad nature of these guidelines, the faculty understands that exceptions from certain guidelines may constitute a preferable solution to issues which may arise. The Informatics faculty will apply exceptions to any of the above guidelines where applicable via unanimous faculty vote. No exceptions may be granted otherwise.

It is the responsibility of students completing Comp projects to formally request exceptions to guidelines via email to their First Reader, who will raise potential concerns with the faculty.