BMI 581 Capstone Project and Graduation Requirements
Master of Science (Non-Thesis)

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A Capstone Project is one of the requirements of the MS (Non-Thesis) degree at OHSU. Students may complete either BMI 581 Capstone (30+ page research paper or publishable manuscript) or BMI 590 Internship to fulfill this requirement. For information on preparing a manuscript, see the *Capstone/Thesis/Dissertation as Manuscript option* in the *MS Non-Thesis Capstone* section on the Student Resources page. For information on BMI 590, see the *MS Non-Thesis Capstone/Internship Plan* section on the Student Resources and Forms page.

Before registering for capstone credits, the student will select a capstone advisor who is a member of the graduate faculty **and** has an appointment at OHSU. It is preferred, though not required, that the advisor have an appointment in the Department of Medical Informatics & Clinical Epidemiology (DMICE). This individual will assume responsibility for advising the student about capstone requirements and procedures. After consulting with the selected faculty member and getting approval of a proposal outline, the student completes the Mentor Assignment Form-Master's, has it signed by the advisor and submits it to the Program Coordinator.

A BMI 581 Capstone project in biomedical informatics is a six-credit, non-independent project that will be performed under the close supervision of the capstone advisor. Project possibilities include, but are not limited to:

- Developing a project that fits into larger framework
- Systematic review
- Piece of a DMICE faculty member's ongoing research project
- Substantial background literature review
- Assist in grant writing
- Curriculum development or revision
- Project with an IT organization, such as ITG
- A study written in the form of a publishable manuscript to be submitted to a journal. (The manuscript does not have to be accepted to fulfill the capstone requirement.) See the *Thesis/Dissertation as Manuscript Option* link on the Student Resources page of the DMICE website.

If your capstone project is related in any way to your professional work, you must describe for your advisor how that topic and your job are distinct.

Capstone work typically progresses in _three_ stages as determined by the student and the advisor:

- Preliminary term: - Choose advisor, submit one-page outline of project/research, submit Mentor Assignment Form – Master's
- Term 1: BMI 581 - Project development, submit OHSU Institutional Review Board (IRB) paperwork if necessary (1.0 credit),
- Term 2: BMI 581 - Project work (e.g., development of system, data collection) and draft of write-up (3.0 credits),
- Term 3: BMI 581 – Finalize write-up, obtain final approval (2.0 credits).

A student completing a capstone in _two_ stages as determined by the student and the advisor would follow this timeline:

- Preliminary term: - Choose advisor, submit one-page outline of project/research, submit Mentor Assignment Form – Master's
- Term 1: BMI 581 – Project development, submit IRB paperwork if necessary, data collection, begin analysis, writing (3.0 credits)
- Term 2: BMI 581 – Complete analysis, finalize write-up, obtain final approval (3.0 credits)

These are general guidelines to follow when planning your capstone project work. It is important that you meet with your capstone advisor on a regular basis.

The following rules apply to the progression of the capstone work:

- The student must complete 30 hours of course work before commencing capstone work.
- The student must have a capstone advisor in place at the beginning of the term in which the project is undertaken. The Mentor Assignment Form-Master's and a one-page project outline must be submitted to the Program Coordinator prior to registering for the first term of BMI 581 Capstone. The project outline should contain the essential details of the proposed work.
- Project outlines must be approved by the OHSU (IRB) if the project will use human subjects or clinical data in any way. Many informatics projects will be exempt from full IRB review. Students must apply to IRB for the exemption. Research with human subjects that is not approved by the IRB constitutes scientific misconduct and is subject to disciplinary action. The student is responsible for obtaining IRB approval. Forms are available at https://www.ohsu.edu/research-integrity/irb-policies-and-forms. This process should be started as early as possible during the first term of capstone work.
- During the second term, the student will continue with data collection and analysis and continue to work on their write-up under the supervision of the capstone advisor. It is strongly recommended that the student and the advisor meet every one to two weeks.
- During the third term, the student will complete the project and submit a final write-up (minimum of 30 pages including charts, graphs, tables, etc., is recommended OR a publishable manuscript) to the Capstone Advisor for approval.

- The student will make any corrections requested by the Capstone Advisor. Follow SOM guidelines for document formatting requirements (see the *SOM Guidelines and Regulations for Completion of Master's and PhD Degrees* link on the Student Resources page of the DMICE website). The *SOM Guidelines* include a sample title page.
- The Capstone Advisor will then sign the Capstone Certificate of Approval page. This becomes page 2 of the capstone, following the title page.
- The student's capstone work is not complete until the Capstone Advisor has signed the Certificate of Approval page. If the project is not approved by the Capstone Advisor, graduation may be delayed.
- Students must sign and submit an Electronic Publication Permission form to ethesis@ohsu.edu. The waiver permits the department to publish the capstone project on the DMICE Alumni page at the specified time. Students must also deliver an electronic version of the capstone in PDF format to ethesis@ohsu.edu and to the Program Coordinator.
- Students must submit a completed Document Submission Form to ethesis@ohsu.edu. Once signed by the librarian, they will email it to the Office of Graduate Studies (with a copy to the Program Coordinator) *by the last day of the term.*