

## **SAFE 6997: Cooperative Internship (3 credits)**

(Effective Fall 2017)

### **Course Description:**

The Master of Environmental Health & Safety program at the University of Minnesota Duluth uses a **Plan C project** as the capstone to its degree requirements. The project will be completed as part of an internship or employment at an industrial, governmental, or other organization that either (a) has an established and active safety program or (b) is in the process of implementing a new or updated safety program. The project itself must require a student to apply knowledge and skills acquired from the MEHS coursework and demonstrate their mastery of EHS-related material and concepts in identifying and addressing a particular concern.

### **Prerequisites and other requirements:**

A student is eligible to take SAFE 6997 if the following criteria are met:

1. The student must not be on probationary status (i.e., have a cumulative 3.0 GPA or better)
2. The student has completed at least one semester of coursework in the MEHS program

A project must be appropriate in size and scope for an internship, suitable for the student based on the coursework and grades attained, and require the application of knowledge and/or skills gained while in the MEHS program. If an MEHS student completes all of the other program coursework before having taken SAFE 6997, they must register for SAFE 6997 within 18 months of completing the other coursework requirements.

MEHS students typically are encouraged to register for SAFE 6997 in the Summer term immediately following their last semester of coursework. Only in extenuating circumstances will a student be allowed to SAFE 6997 in a Fall or Spring term. Such exceptions must be approved by the DGS prior to enrollment in the course.

### **Grading policy and incomplete agreement**

Because internships typically run beyond the end date of the Summer term, the instructor initially will assign an incomplete grade (an "I"). Once registered for SAFE 6997, a student has 12 months to complete the course requirements (see below), starting from the **beginning** of the academic session for which they registered to take SAFE 6997. Once the degree requirements described below are met to the satisfaction of the advisor, the "I" will be changed to an "S." Failure to demonstrate acceptable progress or obtain an extension before a deadline will result in a grade of "N" being assigned for SAFE 6997. If this occurs, the class **MUST** be repeated in order to obtain the MEHS degree.

Prior to the end of the 12 month period, a student unable to meet this deadline must request an extension of up to one year from the current Director of Graduate Studies for the MEHS program. To receive an extension, the student must demonstrate that they have (a) made documented and significant progress on the course requirements or (b) experienced extenuating circumstances preventing acceptable progress. **Do NOT use the Time Extension Request Form found on the Graduate School website.**

If an extension is granted, the advisor and the student must reach agreement in writing regarding a timeframe for completing the degree requirements. If additional extensions are required, they must be requested before the deadline of the current extension and no more than three extensions will be

granted. Please note that ALL degree requirements, including SAFE 6997, must be completed within five years of entering the MEHS program (i.e., the start of the student's first semester in the MEHS program). No extensions will be granted beyond the five year degree completion deadline.

### **IMPORTANT: The GRAD 999 Requirement**

The Graduate School requires a student to maintain CONTINUOUS enrollment (Fall and Spring semesters) in a graduate program, regardless of coursework status. For MEHS students, even if a student has completed all their coursework and registered for SAFE 6997 in a prior term, they MUST register for GRAD 999 for EACH subsequent Fall and Spring semester until they complete the SAFE 6997 course (and degree) requirements. A small cost is associated with registering for GRAD 999.

If a student fails to do this, they will be dropped from the program ("deactivated") and will have to apply to be readmitted into the program for the semester in which they intend to complete the SAFE 6997 course requirements. In addition to the time required to complete the readmission forms, this may have a substantial financial cost associated with it.

### **Course Requirements:**

- 1. Project proposal form:** The student and the internship supervisor must agree upon the proposed project by completing the project proposal form and submitting this to the student's MEHS faculty advisor, ideally within the **first two weeks** of the internship. The proposal includes a description of the project and rationale, a list of the tasks to be completed and what will be delivered to the company (e.g., report, trainings, etc.). **The form must be signed by the student and approved by the supervisor evaluating the student's overall internship performance (see #3).** Based on the criteria provided below, the advisor may approve the project, request modifications or reject the project outright. Given that individual firms have different needs, the **specific subject of the project** is not prescribed. However, the project must be related to occupational safety, industrial hygiene and/or environmental health. Project approval will be based on the student's **background** and interests, the advisor's assessment of the student's ability to complete the project as proposed (e.g., adequate time, availability of necessary resources) and the significance of the project in the environmental health and safety related field.

At times, a company may hire a student for a full-time position prior to completion of degree requirements. In this case, the student is responsible for notifying the company and immediate supervisor to make them aware of the Plan B requirement. The immediate supervisor will need to work with both the student and the student's academic advisor to identify a suitable project to be completed within 3 months of the student's start date.

- 2. Work log:** A minimum of 240 hours is required for a paid internship; the project must comprise a significant portion of those hours (roughly 160 hours minimum). For unpaid internships, a minimum of 160 hours is required and should focus exclusively on the project. Either way, the minimum number of internship hours must be documented and submitted to the program coordinator with the Plan B executive summary (requirement #4). The log must list (and ideally describe) the various projects/major tasks performed and the approximate number of hours spent on each task.

3. **Supervisor evaluation form:** Upon completion of the internship (or, in the case of full time employment, the approved project), the standard evaluation form must be completed by the student's internship supervisor and returned to the program coordinator.
4. **Executive summary (2 page maximum):** Upon completion of the internship, students must submit a 2-page executive summary of the project to both their advisor and the program coordinator, following the template provided below. The summary must be approved by the student's advisor before the student will be allowed to present.

*NOTE : For projects deemed to have significant scientific or professional merit, the student's advisor may encourage the student to prepare an article following the format for an EHS-related journal (e.g., Safety Sciences Journal, Applied Ergonomics) or as a paper for an EHS-related conference (e.g., ASSE, HFES). However, whether or not a student chooses to prepare a publication will have no impact on the grade assigned for SAFE 6997.*

5. **Presentation:** On one of four dates throughout the academic year (to be predetermined by the MEHS program), students will be required to return to campus to orally defend their project by making a 15 minute presentation with an additional 5 minutes for questions. The presentation will be open to current MEHS students, UMD faculty and local safety professionals. For those located farther than 3 hours away by car, videoconferencing or other distance means of presenting (e.g., videotaped presentation in conjunction with a conference call) will be allowed. Presentation materials (slides, handouts, etc.) must be submitted in electronic form to the advisor and program coordinator and approved by the student's advisor before the student will be allowed to present.

## Other details

### Confidentiality

If the article produced by the degree candidate for the firm is likely to contain confidential or proprietary information, this should be noted on the proposal form. Confidentiality will be respected by the committee members and MEHS program; the firm will be asked to review and identify any confidential or proprietary data to be either redacted or altered should the content of the article be presented or published publicly. Where necessary, appropriate paperwork can be completed to formalize a confidentiality agreement.

### Degree is not granted until requirements are met

Although students are unlikely to have completed the internship requirement by the end of the academic school year, they will be permitted to participate in commencement activities. However, the degree will not be granted until ALL degree requirements – which includes a “Satisfactory” grade in SAFE 6997 – have been met.

## **Executive Summary (2 pages maximum): template**

### **Introduction**

This section explains why the project was done and should set the context. This should lead to the project description and end with the goals and objectives for the project (i.e., the expected outcomes, deliverables and impact).

**THIS IS NOT A DESCRIPTION OF RESPONSIBILITIES OR DAILY TASKS THAT YOU PERFORMED DURING YOUR INTERNSHIP.**

### **Methodology**

This section should describe how the project was carried out. Typically, this should include information about (1) the people whom the project impacted, (2) the equipment, tools and resources utilized and (3) the method or procedures used to complete the project.

### **Results**

This section presents the key data and calculated results (no interpretation) from the project. Be sure to mention any conditions under which information or data was collected (e.g., environmental) if they potentially influenced the results. Finally, graphs and tables can be used, but should be used appropriately to concisely present results – and don't forget to provide appropriate captions and labels.

### **Discussion and Conclusions**

This section interprets the results and provides the rationale for any recommendations or interventions.

- Explain any significant trends from the results
- List the problem(s) identified
- Suggest recommendations for correction/improvement
- Provide rationale for why an intervention is likely to be effective
- Discuss any shortcomings, limitations or other factors impacting either data collection, analysis or implementation

## Presentation General Guidelines

A presentation fulfilling the Plan B requirement of the MEHS program should tell a coherent story about a safety-related project providing enough information for a knowledgeable person to understand and use it to:

- a) develop a similar plan/intervention;
- b) implement and carry out the plan/intervention;
- c) assess the effectiveness of the plan/intervention; and,
- d) re-evaluate it using a consistent method (e.g., make updates).

Along those lines, someone should review the presentation materials critically to see how well they understand the content and if the content addresses the following project-related questions:

### 1. WHY was the plan/intervention needed?

For example, what is wrong with the current situation or plan that required your (considerable) time and effort? Provide more detail than just “the old one is incomplete and out-of-date” or “workers keep getting hurt.” Where feasible, present quantitative data in support of your initial needs assessment and/or point out where changes are needed to keep pace with current regulations. Clearly justify why the company needed to proceed with the project. Remember, the reasons for this may be obvious to you, but don't assume they are to the supervisor who's looking at the bottom line...

### 2. What was the rationale for the decisions you made about WHERE, WHAT and WHEN an aspect of your safety plan should be performed or an intervention implemented? For example, how did you:

- (a) Assess operations for potential safety hazards?
- (b) Select operations for monitoring (e.g., what criteria were used to decide if an operation required monitoring)?
- (c) Decide what was to be monitored, what constitutes unacceptable risk, and how often to sample/observe?

### 3. HOW does one carry out the plan or implementation? For example, you might provide details on:

- (a) Sampling/observation frequencies (pre- and post-implementation)
- (b) Communications between internal and external parties required for implementation (include chain-of-command for approvals)
- (c) Equipment selection and procurement
- (d) Recordkeeping
- (e) Hazard mitigation policies, esp. temporary measures
- (f) Assessment of plan/intervention effectiveness (modifications)
- (g) Evaluating new operations (additions to the plan or impacts on intervention)

### 4. What RESOURCES are REQUIRED to carry out the plan/intervention? In particular, what are the budget and/or personnel requirements?

5. Finally, what is/was the impact of the plan on your company's overall safety performance? Given the timeframe of some projects, quantitative metrics may not be possible (e.g., reductions in lost time, lower work comp costs, etc.), but some assessment – even qualitatively – is always necessary to prove the worth of your plan/intervention.

### **Course-related Instructor and University Statements**

#### **1. Instructor's statement regarding students with disabilities**

The MEHS program will work with any and all students with disabilities to identify appropriate accommodations for completing the internship course. I would ask, however, that students with disabilities meet with me as early in the semester as feasible so that accommodations can be arranged with the internship site. Students must also bring a Letter of Accommodation from Disabilities Resources at UMD to the meeting. For more information, please call DR at 218-726-6130 or visit their website at <https://umd-general.umn.edu/disability-resources>.

#### **2. Official university statement on academic dishonesty**

Academic dishonesty is taken seriously by the University. Cheating on assignments or examinations, plagiarizing, or any other act which violates the rights of another student in academic work or that involves misrepresentation of your own work may result in a grade reduction on the assignment/quiz/test or a grade reduction in the class (including the possibility of failing the class). If a student is found responsible for academic dishonesty, a report is filed with the UMD student academic integrity officer and is considered a violation of the Student Conduct Code. The UMD Student Academic Integrity Policy can be found at <http://www.d.umn.edu/academic-affairs/academic-policies/classroom-policies>.... The policy outlines what is considered prohibited conduct.

#### **3. Official university statement on student conduct in the classroom**

Appropriate classroom conduct promotes an environment of academic achievement and integrity. Disruptive classroom behavior that substantially or repeatedly interrupts either the instructor's ability to teach, or student learning, is prohibited. Students are expected to adhere to [Board of Regents Policy](#). Disruptive behavior includes inappropriate use of technology in the classroom. Examples include ringing cell phones, text-messaging, watching videos, playing computer games, doing email, or surfing the Internet on your computer instead of note-taking or other instructor-sanctioned activities."

#### **4. Official university statement on excused absences**

"Students are expected to attend all scheduled class meetings. It is the responsibility of students to plan their schedules to avoid excessive conflict with course requirements. However, there are legitimate and verifiable circumstances that lead to excused student absence from the classroom. These are subpoenas, jury duty, military duty, religious observances, illness, bereavement for immediate family, and NCAA varsity intercollegiate athletics."

For complete information, please see: <http://d.umn.edu/academic-affairs/academic-policies/classroom-policies/excused-absences>

#### **5. Official university statement on class notes and course materials**

"Taking notes is a means of recording information but more importantly of personally absorbing and integrating the educational experience. However, broadly disseminating class notes beyond the classroom community or accepting compensation for taking and distributing classroom notes

undermines instructor interests in their intellectual work product while not substantially furthering instructor and student interests in effective learning.”

For additional information, please see: <http://www.d.umn.edu/vcaa/ClassNotesAppropriateUseof.html>