ESF Course Proposal Form
Committee on Instruction - ESF Faculty Governance
Office of Instruction & Graduate Studies

Date:        April 12, 2013
Course Number:     FCH898
Course Title:    Professional Experience/Synthesis

X New Course   OR
□ Changes in existing course (check all that apply):

□ Prefix                      □ Description                          □ Shared Resources
□ Number                      □ Pre-requisite(s)                     □ Course Format
□ Credits                      □ Co-requisite(s)                      □ Content
□ Title

For new courses only, indicate if you would like approval as a course meeting the General Education standards in the following knowledge and skills area (check all that apply):

□ American History              □ Humanities                           □ Other World Civilizations
□ The Arts                      □ Mathematics                          □ Social Sciences
□ Basic Communication            □ Natural Sciences                    □ Western Civilization

If changing an existing course, describe the change(s):
___________________________________________________________________________________
___________________________________________________________________________________
___________________________________________________________________________________

List any pre- or co-requisites here: ___ Matriculation in Department of Chemistry MPS degree program. Department chair approval required.

Institutional Impact:

Anticipated Enrollment: 0.5-1 per semester

Technology and Classroom Resource Demands: Conventional classroom with projector

Computing Resources:

Library Resources:

Transportation Requirements:

Forest Properties or Field Practicum Facilities Required:

Proposer Contact Information:

Name:_______Greg Boyer____      Department:______Chemistry____
Email:_______glboyer@esf.edu_______      Phone:_______6855_______
Health and Safety Considerations:

Conditions or situations present in association with the course?

1. Will substances with any of the following properties be used during instruction: flammability, toxicity, corrosivity, reactivity, registered pesticide, legally controlled, or other characteristics with the potential to cause harm or injury? (yes)

2. Will any physical hazards be present during instruction? (e.g., machines that need safety guards; razor blades or syringes; compressed gases, etc.). (yes)

3. Will any biological hazards be present during instruction? (e.g., handling animals (rabies or hantavirus); cultures or stocks of infectious agents (fungal spores, viruses, bacteria, etc.). (yes)

4. Will any radiation hazards be present during instruction? (e.g., radioisotopes, X-rays, ultraviolet rays, lasers, etc.). (yes)

5. Will any electrical equipment that, due to its design, location, or method of use, pose any threat to safety during instruction? (Give considerable thought to electrical use outdoors, or any potentially wet location.). (yes)

6. Will there be any personal safety issues related to the class? (e.g., due to time of day or location, at the end of any organized class exercise, will students be in danger of physical assault, etc.). (yes)

7. Will any students be driving official state or research sponsored land or water vehicles during any class or instructional exercise? (yes)

8. Will any type of personal protective equipment be necessary during class exercises? (e.g., hard-hats, eye/face protection, hearing protection, hand/foot protection, lab coat, visibility clothing, etc.) (yes)

If the answer was “Yes” to any of the HEALTH AND SAFETY questions, please explain:

Since there will be no formal instruction, Conditions 1 – 8 may or may not occur depending on the nature of the project and the methods employed in the independent study or project execution. These will need to be determined on a case-by-case basis. The integrative experience for most students will consist of analysis and professional synthesis of work conducted outside of ESF, either through a prior project or work conducted as an intern with an outside organization. However the option does exist for the student to conduct chemical laboratory work at ESF as part of this professional synthesis. The student will need to obtain approval for all proposed work prior to starting the project. The major professor, steering committee, appropriate safety committees and Departmental Chair will review the project for all appropriate safety considerations at that time.

A detailed course description must accompany the Course Proposal Form
DETAILED COURSE DESCRIPTION
FCH 898

COURSE:
FCH 898 Professional Experience/Synthesis
1-6 credit hours – Fall, Spring, Summer
Pre- or co-requisite(s): Matriculation in Department of Chemistry MPS degree program. Department chair approval required.

SCOPE:
Level of Instruction:
Required capstone course at the graduate level for students matriculated in the Master of Professional Studies degree program in the Department of Chemistry.

Relation to curriculum or to other ESF or Syracuse University courses:
FCH 898 is the capstone experience in the Master of Professional Studies degree program of Department of Chemistry. All MPS students in FCH must complete at least 3 credits of this course. No other courses at ESF or SU are available to satisfy this requirement.

STUDENT LEARNING OUTCOMES:
After completing this course the student should be able to:
1. Demonstrate competence in oral and written communication of a specific topic in chemistry.
2. Synthesize traditional academic course material with professional experiences that deal with a problem that is relevant to their area of study.
3. Demonstrate the ability to critically analyze and synthesize chemical information as it applies to a particular problem or experience.

MAJOR CONCEPTS OR METHODOLOGIES:
1. Practical application of chemical principles appropriate to the project and area of study of the student.
2. Written and verbal documentation and reporting at a professional level.

FCH 898 will include, but not be limited to, professional experiences had during internships with business, government agencies, or other appropriate organizations. Students may also do a practicum within the academic environment, working on some relevant problem through self-study and independent work of an applied nature. Activities such as teaching and seminar preparation may be appropriate if approved in advance by the Students MPS steering committee.

CATALOG DESCRIPTION:
FCH 898 Professional Experience/Synthesis (1 – 6 credit hours)
A supervised, documented professional work experience in the Master of Professional Studies degree program. Fall, Spring, or Summer.
Pre- or co-requisite(s): Matriculation in Department of Chemistry MPS degree program. Department chair approval required.
COURSE HISTORY:
The Department of Chemistry adopted the requirements for a Masters in Professional Studies Degree in October 2005. Those requirements called for an Integrative Experience but no specific course was identified as meeting that requirement. This course will serve as the capstone integrative experience for the MPS degree program in Chemistry. Approved by Departmental Action February 15, 2013.