

1) The name of the program (by *registered* title), the award, and the program code number from the *SED Inventory of Registered Programs*. If the program leads to teacher certification, indicate the current certificate area and level. If the program leads to New York State licensure, please state.

**The name of the program:** Master of Science, Chemistry – Thesis, Non Thesis, and Professional Tracks

**The award:** Master of Science

**The program code:** 810 (Chemistry MS) and 834 (Chemistry MS Professional Track)

**The program does not lead to teaching certificate or licensure.**

2) Description of the proposed change and rationale for the change. The most compelling rationale is grounded academically, often arising from the results of ongoing assessment, changes in quality standards, or comparative market information.

**Description of Proposed Change:** The Department of Chemistry faculty proposes following revisions for the chemistry graduate program to be considered for approval:

- 1- Instead of listing courses as “typical courses” under core program, we are proposing to make all core courses to be taken from three different disciplines of chemistry.
- 2- Addition of the following requirement for the courses taken outside of the chemistry department: “Any course outside of the department must be approved by the chemistry graduate committee”.
- 3- Addition of the following language for the approval of the fulfilling the internship requirement of the Professional Track by Peace Corps experience: “A Peace Corps experience, which must be approved by the chemistry graduate committee, related to student's area of study will satisfy the internship requirement of GST691.”

(See pages 2 and 3 for the side-by-side comparison of current and proposed track).

**Rationale for the change:**

- 1- The proposed change for the core program has been the practice in the program over six years, and the change will clarify the program for the students. Both the current and the revised program will achieve the same purpose: providing a broader foundation other than student's interest area. In addition, the change will provide a broader selection of the courses which will complement the student's area of interest.
- 2- Current language in the program requirement regarding departmental approval for the courses taken outside of the chemistry department is not clear enough for the students. There were couple incidents which happened in recent years prompted this change. The new language does not change the requirement, but reinforces and clarifies the language.
- 3- The State University of New York and the Peace Corps have established a partnership which will allow students completing master's degree programs at SUNY institutions the

possibility of embedding a Peace Corps service experience into their graduate education program. Oswego Chemistry Graduate Program would like to provide this opportunity to its students by allowing their Peace Corps experience substitute the Internship requirement of the Professional track. Department will require Peace Corps placements in the student's area of the study to ensure that the placement will fulfill the departments expectations from an internship. (Appendix A: SUNY Guidelines for Peace Corps Masters International, Appendix B: Benefits for the students)

3) Curriculum outline of the current program and of the proposed revised curriculum, with changes in program (e.g., courses added, deleted) clearly noted. In many cases, draft or actual catalog copy proves a helpful means of providing this information.

**Side-by Side Comparison of Current and Proposed Changes (as highlighted)**

<b>Thesis Option</b>	<b>Credit Hours</b>	<b>Proposed Thesis Option</b>	<b>Credit Hours</b>
Core program Typical courses: CHE525 CHE536 CHE543 CHE544 CHE552	9	Core Program Graduate courses from three different disciplines of chemistry	9
Electives	9-14	Electives	9-14
Seminar CHE596	1	Seminar CHE596	1
Research CHE598	6-11	Research CHE598	6-11
<b>TOTAL</b>	<b>30</b>	<b>TOTAL</b>	<b>30</b>

<b>Non-Thesis Option</b>	<b>Credit Hours</b>	<b>Proposed Non-Thesis Option</b>	<b>Credit Hours</b>
Core program Typical courses: CHE525 CHE536 CHE543 CHE544 CHE552	9	Core Program Graduate courses from three different disciplines of chemistry	9
Electives	17	Electives	17
Seminar CHE596	1	Seminar CHE596	1
Research CHE597 or 599	3	Research CHE597 or 599	3

<b>TOTAL</b>	<b>30</b>	<b>TOTAL</b>	<b>30</b>
<b>Professional Option</b>	<b>Credit Hours</b>	<b>Proposed Professional Option</b>	<b>Credit Hours</b>
Core program Typical courses: CHE525 CHE536 CHE543 CHE544 CHE552	9	Core Program Graduate courses from three different disciplines of chemistry	9
Electives	12	Electives	12
Seminar CHE596	1	Seminar CHE596	1
Internship GST691	3	Internship GST691	3
Business Courses Required: MBA517 Electives: MBA501 MBA502 MBA503 MBA505 MBA506 MBA515 MBA516	9	Business Courses Required: MBA517 Electives: MBA501 MBA502 MBA503 MBA505 MBA506 MBA515 MBA516	9
<b>TOTAL</b>	<b>34</b>	<b>TOTAL</b>	<b>34</b>

**Program Notes (Additions are underlined)**

1. Elective courses may be taken in departments other than chemistry. Any course outside of the department must be approved by the chemistry graduate committee. All elective courses must be selected, under advisement.
2. In the thesis option all students are required to take a minimum of six accumulated credit hours of Chemistry 598, Thesis. A maximum of seventeen credit hours of thesis may be taken if approved by the Departmental Graduate Advisory Committee. The thesis involves an original research problem and a formal dissertation. Students are required to give an oral presentation of their work.
3. All students are required to take one credit hour of seminar.
4. After completing fifteen credit hours, the student is evaluated by the department with respect to recommendation for degree candidacy provided the student has demonstrated competency in four areas of chemistry.
5. All students are required to pass qualifying examinations in four of five main areas of chemistry that include, analytical, biochemistry, inorganic, organic and physical.
6. The GST 691 Internship requirement in the professional option is required to be a minimum of eight weeks, forty hours per week long. Students are responsible for finding an internship

placement with the help of the Office of Experience-Based Education. Students are required to write a report and to give a presentation after the internship.

7. A Peace Corps experience, which must be approved by the chemistry graduate committee, related to student's area of study will satisfy the internship requirement of GST691.

4) Course outlines for new courses, if any. Indicate prerequisites, the frequency with which the course is offered, and the name, faculty rank, and status of the instructor(s). If none, please state so.

**There are no new courses.** All the courses currently exist and are taught on a regular basis. A chemistry faculty will serve as a faculty sponsor for Peace Corps placement based on the area of the study and placement.

5) For new faculty teaching new courses, provide brief résumé(s). If no new faculty is required, please state.

**No additional faculty is required,** since all the courses currently exist and are taught by existing faculty on a regular basis.

6) Description of any additional costs. If none, please explain.

**No additional cost is anticipated,** since all courses are currently offered and have enough seats to accommodate any additional student increase within the program. Program does not expect more than one or two additional students with the addition of Peace Corps.

7) Effective date of the change in the program. If the current program needs to remain registered until students have graduated (or have been otherwise accommodated), please indicate the anticipated effective date by which matriculates will have cleared the old version of the program.

**Effective date of the change in the program:** Spring 2014 semester.

The changes will impact the current students, since proposed changes #1 and #2 are reinforcing the current practice within the program. The third proposed change will apply for only future students when the program is get registered with Peace Corps.

## **Appendix A: SUNY Guidelines for Peace Corps Masters International**

### **What benefits will PCMI bring to SUNY campuses and departments?**

The distinctive PCMI offering will be attractive not only to NYS students, but to students from throughout the U.S. who wish to combine Peace Corps service with high quality graduate education at an affordable price. The PCMI program attracts highly motivated individuals committed to national and local public service, who are willing to challenge themselves personally and intellectually. Students who pursue PCMI degree programs gain two years of significant international work experience in their chosen profession, which serves as a strong credential and career pathway upon completion. The presence of these students will enrich departmental and campus environments. While students are abroad during their Peace Corps placement, faculty will provide ongoing consultation on technical issues. Connections with Peace Corps volunteers during their service offer extensive possibilities for research and curricular enhancement. Returned Peace Corps volunteers who come back to campus to finish their degree requirements (where applicable) will bring significant experience to share with the campus and local community; they will serve as natural role models and promoters for PCMI on campus.

### **What benefits will SUNY bring to the Peace Corps?**

Communities overseas will benefit from the service provided by highly trained SUNY students. In addition, as those students maintain their close alliance with their university department, the richness of the university faculty can be made available for assistance with specific projects and technical issues as they arise. The Peace Corps will benefit from the knowledge and technical skills of the students and the campuses. In addition, with a streamlined approval process, SUNY will be able to bring programs on-board to PCMI quickly in response to shifts in demand for specific discipline areas. While the majority of PCMI programs approved are in the technical areas identified in the Peace Corps strategy (currently they are Education, Health, Community Economic Development, Agriculture, Environment, and Youth in Development), the Peace Corps often has a need for generalists. With this system-wide SUNY PCMI program, the Peace Corps will benefit by being able to incorporate more PCMI students with a high level of education in the humanities and social sciences, who can adapt to multiple geographic and professional placement settings.

***For more information:*** <http://www.global.suny.edu/oip/peacecorps.cfm>

## **Appendix B: Peace Corps Benefits to the Students ([www.peacecorps.org](http://www.peacecorps.org))**

Master's International (MI) offers the unique opportunity to integrate a master's degree with overseas service in a variety of fields at more than 80 academic institutions nationwide. Established in 1987, MI produces Peace Corps Volunteers with additional education and skills to serve overseas—and helps you earn your advanced degree along the way.

As a prospective student, you should apply to your graduate school(s) of choice first. When accepted, submit your application to the Peace Corps. After completing initial coursework and being assigned to your country of service, you will travel to your site and begin training. Assignments are determined according to the needs and requests of the host country. While overseas, your primary responsibility is the project and community to which you have been assigned. Your master's project will grow out of your Peace Corps work.

Your degree may require the completion of a thesis, paper, or other culminating project, developed under the direction of university faculty members. It is important to be flexible and, in some cases, creative, when transforming your Volunteer service into your graduate work. After completing your Peace Corps service, you will return to school to complete any requirements necessary for graduation. You will have the advantage of having applied theory to practice while engaging in significant development work overseas. MI students return to the United States with an enhanced world view and the skills and education to continue to make a difference.

**How to become MI Student?** Becoming an MI student requires a combination of focus, flexibility, and dedication. As an MI student, you will spend one to two academic years on campus focusing on coursework. Upon receiving your overseas assignment and traveling to your host country, you will serve for 27 months, which includes up to three months of language, cross-cultural, and technical training. Toward the end of your training, you will receive your Peace Corps assignment. Peace Corps assignments are strategically developed by in-country staff based upon the needs and requests of the country. Before leaving for your site, you will be sworn in as a Peace Corps Volunteer.

While overseas, you will be a Peace Corps Volunteer first; your academic project will emerge from your Peace Corps service. Following service, you may be required to return to campus to complete your academic project or any other outstanding work needed for your degree. After finishing your academic work, you will have obtained a master's degree in your respective field with two years of significant international work experience.

**Benefits for the Student** As an MI student, you have an unparalleled opportunity to live and work overseas while completing a master's degree in your field of interest. You will earn more than your degree, returning with feelings of independence, confidence, and accomplishment. The benefits of the MI program can last a lifetime.

Some other benefits include:

- Language, cross-cultural, and technical training
- Transportation costs to and from the country of service
- Living and housing expenses during overseas service
- Medical and dental coverage
- Vacation time and allowance
- Deferment or possible cancellation of certain government education loans
- Readjustment allowance upon completion of service
- Career counseling and job search facilities available to returned Peace Corps Volunteers