**The George Washington University**

**School of Medicine and Health Sciences**

**GRADUATE CERTIFICATE in TEACHING IN THE SCIENCES and PROFESSIONS (TSAP)**

**Proposed Implementation: Fall 2018**

**Rationale**

The George Washington University School of Medicine and Health Sciences (SMHS) offers numerous programs in which graduate students are either required to teach or will teach upon graduation (graduate and doctoral level programs in the basic sciences and the health sciences; post-doctoral programs; and residencies in graduate medical education across the clinical departments). In addition, many research track faculty teach students in master’s classes, laboratories, and other learning venues.

The vast majority of these individuals have little or no preparation in teaching. The SMHS Center for Faculty Excellence proposes this certificate program to address this gap with a 12-credit, 2 semester program that includes online and classroom-based instruction and significant practice. Successful completion of the certificate program will enhance the teaching of students in science degree programs and improve the marketability of our graduates in the academic marketplace.

**Purpose and Objectives**

The Graduate Certificate in Teaching in the Sciences and Professions curriculum will facilitate the adoption of excellent teaching practices among SMHS graduate, doctoral and post-doctoral students, residents and research faculty with teaching responsibilities.

By the completion of the program, those enrolled should be able to:

1. Prepare the basic elements of a course syllabus linked to a given program of study.

2. Demonstrate alignment of course and session learning objectives, teaching strategies, and formative and summative assessment methods.

3. Illustrate the components of effective teaching and learning experiences in large and small groups and online.

4. Assess the effectiveness of peers’ teaching.

5. Identify areas of their teaching requiring further development.

**Program Participants**

Admission will be offered to 12 graduate students, post-doctoral students, residents or research track faculty annually. Given the level of the enrollees, all will have a bachelor’s degree and either a Master’s, MD degree, or doctorate from an accredited institution.

**Academic Requirements**

Course grades and credits will be visible on student transcripts. Grading will follow a standard A-F scale but completion of all assignments will be required for a grade to be posted. Transfer credits will not be allowed. Students will handle their own registration. Students must maintain a grade-point average of 3.0 or above. The program must be completed in two semesters consecutive semesters; fall and the following spring. No incompletes will be given. Upon program completion, students will receive a Graduate Certificate in Teaching in the Sciences and Professions from George Washington University.

**Curriculum**

The program consists of two 6 credit courses completed sequentially: ***Fundamentals of Teaching (fall) and Practicum in Teaching*** (spring).

***Fundamentals of Teaching consists of one face to face class session of two hours followed by six on-line modules each of which require approximately 30-40 hours of work (readings, assignments, discussion postings, peer review). The sessions and topics to be covered include:***

Introduction and Overview (face to face). Certificate overview, participant introductions, and teaching philosophies.

Principles of Learning (online): Key principles (i.e.: types and styles of learning, motivational factors and organization of knowledge) and how they relate to excellence in teaching.

Session Design (online): Establishing learning objectives, ordering content, selecting teaching methods, and incorporating active learning techniques.

Planning a Course (online): Syllabus components, types of assignments, and grading schemes.

Assessment of Learning (online): Formative and summative assessments, classroom assessment techniques, and assignment grading rubrics.

Teaching with Technology (online): Selection of appropriate technology for in class and online sessions, and access, safety and copyright issues.

Best Practice in Teaching (online): Preparing to teach, expectations of students, conducting class, and responding to students.

***Practicum in Teaching consists of a three-day intensive face to face workshop (45 hours including prep time) followed by 100 hours of preparation and delivery of online and classroom teaching practice and observation, culminating with the development of an individual portfolio (80 hours), as follows:***

Three-day Workshop (face to face): Individual, paired and small group work to re-inforce the concepts covered in Fundamentals of Teaching and prepare students for practice teaching.

Practice Teaching (individually scheduled): Design, delivery and assessment of two, two-hour online and two, two-hour face to face classroom sessions with peer and faculty feedback, and observation and discussion of sessions taught by others.

Individual Portfolio Development: Compilation of all prior course requirements, a written reflection, a statement of teaching philosophy, and a 1-year plan for continued professional development as an educator.

**Program Direction and Faculty**

The certificate program will be directed by Ellen Goldman, EdD, Professor of Human and Organizational Learning (GSEHD) and of Clinical Research and Leadership (SMHS), and Assistant Dean for Faculty and Curriculum Development in Medicine. Dr. Goldman leads the SMHS Center for Faculty Excellence. We expect the Center for Faculty Excellence staff to comprise the faculty for the online and classroom portions of this program. They include two additional individuals with doctorates in education and a highly seasoned instructional designer. The practicum portion of the program will be aided by faculty mentors chosen by the participants.