

# **Certificate Assessment Plan: Graduate Certificates in Forensic Sciences, Clinical Toxicology and Pharmaceutical Chemistry**

**College of Pharmacy  
Dr. Ian Tebbett, Director  
[itebbet@cop.ufl.edu](mailto:itebbet@cop.ufl.edu)**

*Office of the Provost  
University of Florida  
Institutional Assessment  
Continuous Quality  
Enhancement Series*

Certificate Name

College Name

Contact Name & email

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# Forensic Sciences, Clinical Toxicology & Pharmaceutical Chemistry College of Pharmacy *2012-13 Certificate Assessment Plan*

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## **A. Rationale**

Enter your certificate rationale here. See page 3 of the “Certificate Assessment Plan” instructions.

The College of Pharmacy offers graduate certificates associated with our MS in Pharmacy concentrations in forensic science, forensic drug chemistry, forensic DNA & serology, clinical toxicology and pharmaceutical chemistry. Specifically current certificate programs are;

Forensic Death Investigation

Forensic Drug Chemistry

Forensic DNA and Serology

Clinical Toxicology

Pharmaceutical Chemistry

Each certificate program consists of 15 graduate credits that may be counted toward the appropriate MS degree, or used in their own right to gain graduate level knowledge of a particular discipline. The certificates are popular with state and Federal agencies in support of their in house training efforts and are of interest to those already working in an operational setting including: Crime Laboratories, Medical Examiner’s Office, Law enforcement agencies, Criminal defense and prosecution attorneys, Military personnel, Hospital and Clinical Chemistry Laboratories and Pharmaceutical Industry.

## **B. Mission**

Enter your mission alignment statement here. See page 4 of the “Certificate Assessment Plan” instructions.

The College's mission includes the promotion and fostering of graduate education in pharmaceutical, clinical, administrative and psychosocial sciences. Students are educated to become distinguished contributors to pharmacy and related disciplines. These programs support that mission.

### C. Student Learning Outcomes (SLOs)

Enter the certificate SLOs here. See page 4 of the "Certificate Assessment Plan" instructions. Guidance for revising SLOs can also be found on the [Institutional Assessment website](#).

Student Learning Outcomes	Assessment Method
<b>Knowledge:</b> Demonstrate comprehensive knowledge related to a specific discipline within the pharmaceutical sciences.	Document scores of each student on a comprehensive final exam. The written and/or exams will be constructed by members of the host department and graded according to the rubric; unsatisfactory, competent or excellent.
<b>Problem-Solving/Critical Thinking SLO:</b> Demonstrate the ability to evaluate a research problem that is related to a discipline within the Pharmaceutical Sciences.	Assess each student's completion of a written assignment that requires the use of problem-solving/critical thinking skills that uses a rubric as unsatisfactory, competent or excellent.

## D. Assessment Timeline for Certificates

See page 4 of the "Certificate Assessment Plan" instructions. All certificates will use this timeline to map their assessments.

Program: Graduate Certificates in Pharmaceutical Sciences

College: Pharmacy

SLOs Certificate Programs	knowledge	Problem solving		
Forensic Death Investigation	Several times/semester	Once/semester		
Forensic Drug Chemistry	Several times/semester	Once/semester		
Forensic DNA & Serology	Several times/semester	Once/semester		
Clinical Toxicology	Several times/semester	Once/semester		
Pharmaceutical Chemistry	Several times/semester	Once/semester		

## E. Assessment Cycle Chart for Certificates

See page 4 of the "Certificate Assessment Plan" instructions.

Program: Graduate Certificates in Pharmaceutical Science s

College: Pharmacy

Analysis and Interpretation:

End of Spring, Summer and Fall Semester

Improvement Actions:

Completed by Start of Fall Semester

Dissemination:

Completed by Start of Fall semester

SLOs	Year	12-13	13-14	14-15	15-16
Knowledge		X	X	X	X
Problem Solving		X	X	X	X

## F. Methods and Procedures

Enter text here. See page 5 of the “Certificate Assessment Plan” instructions

Each of the graduate certificate programs consists of 15 credits of graduate education delivered online through four or five courses. Each 15 week course is divided into modules and each module has an assignment that is graded every 1-2 weeks. These assignments test the students’ knowledge of the material, and incorporate case studies and exercises designed to test the student’s critical thinking abilities. This data is collected throughout the course and collated at the end of each semester. On completion of the certificate program, the student will have been evaluated through around 45 assignments and several case studies. This information enables us to determine each student’s learning outcomes, and modify lessons as needed..

## G. Assessment Oversight

See page 5 of the “Certificate Assessment Plan” instructions. Add additional rows as needed.

Name	Department Affiliation	Email Address	Phone Number
Ian Tebbett	College of Pharmacy	<a href="mailto:itebbett@ufl.edu">itebbett@ufl.edu</a>	352 271 6871
William Millard	College of Pharmacy	<a href="mailto:millard@cop.ufl.edu">millard@cop.ufl.edu</a>	352 273 6311