

**1. General Information**

1a. Submitted by the College of: ARTS &amp; SCIENCES

Date Submitted: 11/13/2013

1b. Department/Division: Chemistry

1c. Contact Person

Name: Mark Lovell

Email: malove2@uky.edu

Phone: 257-1412 x 251

Responsible Faculty ID (if different from Contact)

Name:

Email:

Phone:

1d. Requested Effective Date: Specific Term/Year<sup>1</sup> Spring 2015

1e. Should this course be a UK Core Course? No

**2. Designation and Description of Proposed Course**

2a. Will this course also be offered through Distance Learning?: No

2b. Prefix and Number: CHE 250

2c. Full Title: Forensic Science on Television

2d. Transcript Title:

2e. Cross-listing:

2f. Meeting Patterns

LECTURE: 3

2g. Grading System: Letter (A, B, C, etc.)

2h. Number of credit hours: 3

2i. Is this course repeatable for additional credit? No

If Yes: Maximum number of credit hours:

If Yes: Will this course allow multiple registrations during the same semester?

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2j. **Course Description for Bulletin:** This course will introduce students to the basic chemical and biochemical principles of forensic science utilized on popular science/science fiction television shows. Forensic science involves the application of techniques from instrumental chemical analysis and molecular biology to identify and quantify evidence collected from crime scenes. By using popular television shows to introduce specific techniques students should gain a basic understanding of the capabilities and limitations of forensic science as it is presently practiced.

2k. **Prerequisites, if any:** CHE 103 or CHE 104 or CHE 110 or CHE 105

2l. **Supplementary Teaching Component:**

3. **Will this course taught off campus?** No

If YES, enter the off campus address:

4. **Frequency of Course Offering:** Spring,

Will the course be offered every year?: Yes

If No, explain:

5. **Are facilities and personnel necessary for the proposed new course available?:** Yes

If No, explain:

6. **What enrollment (per section per semester) may reasonably be expected?:** 65

7. **Anticipated Student Demand**

Will this course serve students primarily within the degree program?: No

Will it be of interest to a significant number of students outside the degree pgm?: Yes

If Yes, explain: The course is designed for non-science majors who would like to increase their understanding of the science that is presented in the media.

8. **Check the category most applicable to this course:** Relatively New – Now Being Widely Established,

If No, explain:

9. **Course Relationship to Program(s).**

a. **Is this course part of a proposed new program?:** No

If YES, name the proposed new program:

b. **Will this course be a new requirement for ANY program?:** No

If YES, list affected programs:

10. **Information to be Placed on Syllabus.**

a. **Is the course 400G or 500?:** No

b. **The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if applicable, from 10.a above) are attached:** Yes

## Distance Learning Form

Instructor Name:

Instructor Email:

Internet/Web-based: No

Interactive Video: No

Hybrid: No

1. How does this course provide for timely and appropriate interaction between students and faculty and among students? Does the course syllabus conform to University Senate Syllabus Guidelines, specifically the Distance Learning Considerations?

2. How do you ensure that the experience for a DL student is comparable to that of a classroom-based student's experience? Aspects to explore: textbooks, course goals, assessment of student learning outcomes, etc.

3. How is the integrity of student work ensured? Please speak to aspects such as password-protected course portals, proctors for exams at interactive video sites; academic offense policy; etc.

4. Will offering this course via DL result in at least 25% or at least 50% (based on total credit hours required for completion) of a degree program being offered via any form of DL, as defined above?

If yes, which percentage, and which program(s)?

5. How are students taking the course via DL assured of equivalent access to student services, similar to that of a student taking the class in a traditional classroom setting?

6. How do course requirements ensure that students make appropriate use of learning resources?

7. Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program.

8. How are students informed of procedures for resolving technical complaints? Does the syllabus list the entities available to offer technical help with the delivery and/or receipt of the course, such as the Information Technology Customer Service Center (<http://www.uky.edu/UKIT/>)?

9. Will the course be delivered via services available through the Distance Learning Program (DLP) and the Academic Technology Group (ATL)? NO

If no, explain how student enrolled in DL courses are able to use the technology employed, as well as how students will be provided with assistance in using said technology.

10. Does the syllabus contain all the required components? NO

11. I, the instructor of record, have read and understood all of the university-level statements regarding DL.

Instructor Name:

SIGNATURE[MEIER]Mark S Meier|CHE 250 NEW Dept Review|20131214

SIGNATURE[RHANSON]Roxanna D Hanson|CHE 250 NEW College Review|20140210

SIGNATURE[JMETT2]Joanie Ett-Mims|CHE 250 NEW Undergrad Council Review|20140501

Courses	Request Tracking
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## New Course Form

<https://myuk.uky.edu/sap/bc/soap/rfc?services=>

[Open in full window to print or save](#)

Generate R

## Attachments:

Browse...

Upload File

	ID	Attachment
Delete	3434	CHE 250 syllabus corrected April 30 2014.pdf

First 1 Last

Select saved project to retrieve...

Get New

(\*denotes required fields)

## 1. General Information

- a. \* Submitted by the College of: ARTS & SCIENCES Submission Date: 11/13/2013
- b. \* Department/Division: Chemistry
- c.
- \* Contact Person Name: Mark Lovell Email: malove2@uky.edu Phone: 257-1412 x 251
- \* Responsible Faculty ID (if different from Contact) Email: Phone:
- d. \* Requested Effective Date:  Semester following approval OR  Specific Term/Year  Spring 2015
- e. Should this course be a UK Core Course?  Yes  No
- If YES, check the areas that apply:
- Inquiry - Arts & Creativity  Composition & Communications - II
- Inquiry - Humanities  Quantitative Foundations
- Inquiry - Nat/Math/Phys Sci  Statistical Inferential Reasoning
- Inquiry - Social Sciences  U.S. Citizenship, Community, Diversity
- Composition & Communications - I  Global Dynamics

## 2. Designation and Description of Proposed Course.

- a. \* Will this course also be offered through Distance Learning?  Yes  No
- b. \* Prefix and Number: CHE 250
- c. \* Full Title: Forensic Science on Television
- d. Transcript Title (if full title is more than 40 characters):
- e. To be Cross-Listed<sup>2</sup> with (Prefix and Number):
- f. \* Courses must be described by at least one of the meeting patterns below. Include number of actual contact hours<sup>3</sup> for each meeting pattern type.
- |  |  |                                 |                                 |
|--|--|---------------------------------|---------------------------------|
| <input type="text" value="3"/> Lecture | <input type="text"/> Laboratory <sup>4</sup> | <input type="text"/> Recitation | <input type="text"/> Discussion |
| <input type="text"/> Indep. Study      | <input type="text"/> Clinical                | <input type="text"/> Colloquium | <input type="text"/> Practicum  |
| <input type="text"/> Research          | <input type="text"/> Residency               | <input type="text"/> Seminar    | <input type="text"/> Studio     |
| <input type="text"/> Other             | If Other, Please explain:                    |                                 |                                 |
- g. \* Identify a grading system:
- Letter (A, B, C, etc.)
- Pass/Fail
- Medicine Numeric Grade (Non-medical students will receive a letter grade)
- Graduate School Grade Scale
- h. \* Number of credits: 3
- i. \* Is this course repeatable for additional credit?  Yes  No
- If YES: Maximum number of credit hours:
- If YES: Will this course allow multiple registrations during the same semester?  Yes  No

## J. \* Course Description for Bulletin:

This course will introduce students to the basic chemical and biochemical principles of forensic science utilized on popular science/science fiction television shows. Forensic science involves the application of techniques from instrumental chemical analysis and molecular biology to identify and quantify evidence collected from crime scenes. By using popular television shows to introduce specific techniques students should gain a basic understanding of the capabilities and limitations of forensic science as it is presently practiced.

## k. Prerequisites, if any:

CHE 103 or CHE 104 or CHE 110 or CHE 105

l. Supplementary teaching component, if any:  Community-Based Experience  Service Learning  Both3. \* Will this course be taught off campus?  Yes  No

If YES, enter the off campus address:

## 4. Frequency of Course Offering.

a. \* Course will be offered (check all that apply):  Fall  Spring  Summer  Winter

b. \* Will the course be offered every year?  Yes  No

If No, explain:

5. \* Are facilities and personnel necessary for the proposed new course available?  Yes  No

If No, explain:

## 6. \* What enrollment (per section per semester) may reasonably be expected? 65

## 7. Anticipated Student Demand.

a. \* Will this course serve students primarily within the degree program?  Yes  No

b. \* Will it be of interest to a significant number of students outside the degree pgm?  Yes  No

If YES, explain:

The course is designed for non-science majors who would like to increase their understanding of the science that is presented in the media.

## 8. \* Check the category most applicable to this course:

Traditional – Offered in Corresponding Departments at Universities Elsewhere

Relatively New – Now Being Widely Established

Not Yet Found in Many (or Any) Other Universities

## 9. Course Relationship to Program(s).

a. \* Is this course part of a proposed new program?  Yes  No

If YES, name the proposed new program:

b. \* Will this course be a new requirement<sup>2</sup> for ANY program?  Yes  No

If YES<sup>2</sup>, list affected programs::

## 10. Information to be Placed on Syllabus.

a. \* Is the course 400G or 500?  Yes  No

If YES, the *differentiation for undergraduate and graduate students must be included* in the information required in 10.b. You must include: (i) identify additional assignments by the graduate students; and/or (ii) establishment of different grading criteria in the course for graduate students. (See SR

b.  \* The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if applicable above) are attached.

<sup>1</sup> Courses are typically made effective for the semester following approval. No course will be made effective until all approvals are received.  
<sup>2</sup> The chair of the cross-listing department must sign off on the Signature Routing Log

- In general, undergraduate courses are developed on the principle that one semester hour of credit represents one hour of classroom meeting per week for a semester, exclusive of any laboratory meeting. Laboratory meeting, generally, is two hours per week for a semester for one credit hour. (from SR 5.2.1)
- You must also submit the Distance Learning Form in order for the proposed course to be considered for DL delivery.
- In order to change a program, a program change form must also be submitted.

Rev 8/09

Submit as New Proposal    Save Current Changes

**CHE-250**  
**FORENSIC SCIENCE ON TELEVISION**  
**University of Kentucky, Chemistry Department**  
**Spring Semester, 20xx**

**Course Description:** This course will introduce students to the basic chemical and biochemical principles of forensic science utilized on popular science/science fiction television shows. Forensic science involves the application of techniques from instrumental chemical analysis and molecular biology to identify and quantify evidence collected from crime scenes. By using popular television shows to introduce specific techniques students should gain a basic understanding of the capabilities and limitations of forensic science as it is presently practiced.

**Course Information:**

- **Lectures:** TR, 9:30 – 10:45 a.m., CP-201, 3 credits.
- **Textbook:** *Criminalistics: An Introduction to Forensic Science*, 10<sup>th</sup> Edition, R. Saferstein, Prentice Hall, 2010.
- **Instructor:** Dr. Mark Lovell
  - Offices: CP-102 and 135 Sanders-Brown
  - Office Hours: 11:00 -12:00 noon T,R (SB-135), 2:00 – 3:00 F (CP-102) or by appointment.
  - E-mail: malove2@email.uky.edu
  - Phone:
    - Office: 257-7070 (Chemistry); 257-1412 x 251 (Sanders-Brown)

**Exams:**

Exam	Date	Time
I	Thursday, February 9	9:30
II	Thursday March 8	9:30
III	Thursday, April 5	9:30
Final (Comprehensive)	Friday, May 4	10:30

**Grading Procedure and Scale:**

- **Midterm Exams:** 60%; **Comprehensive Final Exam:** 20%.
- **Written Assignment (Case Study):** 15%. Each student will select by blind draw a case study that presents a “real” forensic case. Your case study is to be type written and a minimum of 8 double spaced pages. The case study should have the following format: Title, Crime Scene, Evidence, Description of Analytical Tests, Results of Analysis, Conclusion, and Bibliography. You should focus your case study on the physical evidence and the tests used to analyze it. Your paper should cite the sources of information and contain an illuminating bibliography with both print and online sources. In writing papers, you must properly cite all sources (1) directly quoted, (2) paraphrased, or (3) consulted in any fashion. Sources include all printed material as well as the Internet. Case studies are worth 100 points and any late submissions will lose 10 points for each class day they are late.

- **Class Participation/Short Written Assignments:** 5% Class participation will be based on successful completion of short surveys/questionnaires following viewing of TV shows that introduce the forensic subjects under study as well as short homework assignments. Participation assignments will be turned in at the end of the class period during which the TV program is viewed. Missed class participation assignments will not be counted against the student for legitimate excused absences.
- **Midterm Grades:** Midterm grades will be posted on myUK by the midterm date.

<u>Final Grade</u>	<u>Final Average</u>
A	89.50 – 100.0
B	79.50 - 89.49
C	69.50 – 79.49
D	59.50 – 69.49
E	59.49 and Below

### **Important Dates:**

January 16 – Martin Luther King Birthday – Academic Holiday

February 1 – Last day to withdraw from the course without it appearing on your transcript.

March 5 – Midterm

March 12 – March 17 – Spring Vacation – Academic Holidays

April 6 – Last day to withdraw from the course.

April 27– Last day of class

### **Make-up Exams/Other Assignments:**

Formal written excuses consistent with University regulations will be required for each exam absence before a makeup exam can be scheduled. Makeup exams will be given only at one time after the third hour exam but prior to the deadline to withdraw from the course. Notice of intended absence due to a religious holiday must be presented in writing, before the last day to add a class. Students have one week after an excused absence to make up any missed short writing assignments.

### **Calculators:**

A student may use a non-programmable calculator for exams. Calculators may not be shared.

### **Dropping the Course:**

The student cannot withdraw from the course after April 6 except for urgent non-academic reasons related to extended illness or equivalent distress. ***Withdrawal from the course after April 6 requires approval of the Dean.***

### **Academic Dishonesty:**

Academic dishonesty or cheating of any kind will not be tolerated. A first offense will result in a zero for the assignment. A second offense will result in automatic failure of the course. Additional sanctions are possible. Stipulated University procedures as described in the latest copy of Student Rights and Responsibilities ([www.uky.edu/StudentAffairs/Code](http://www.uky.edu/StudentAffairs/Code)) will be

followed. When preparing your case study it is also considered plagiarism if you merely rework source material, placing an author's thoughts in other words without contributing your own ideas.

**Attendance Policy:** Class participation counts as 5% of the final grade and will be based on successful completion of short surveys/questionnaires and participation in discussion following viewing of TV shows that introduce the forensic subjects under study. Participation assignments will be turned in at the end of the class period during which the TV program is viewed. THEREFORE, ATTENDANCE IS MANDATORY. Missed class participation assignments will not be counted against the student for legitimate excused absences. Students with an unexcused absence will not receive participation points for that day.

### **Excused Absences**

Students need to notify the professor of absences prior to class when possible. S.R. 5.2.4.2 defines the following as acceptable reasons for excused absences: (a) serious illness, (b) illness or death of family member, (c) University-related trips, (d) major religious holidays, and (e) other circumstances found to fit "reasonable cause for nonattendance" by the professor.

Students anticipating an absence for a major religious holiday are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays no later than the last day in the semester to add a class. Information regarding dates of major religious holidays may be obtained through the religious liaison, Mr. Jake Karnes (859-257-2754).

Students are expected to withdraw from the class if more than 20% of the classes scheduled for the semester are missed (excused or unexcused) per university policy.

### **Verification of Absences**

Students may be asked to verify their absences in order for them to be considered excused. Senate Rule 5.2.4.2 states that faculty have the right to request "appropriate verification" when students claim an excused absence because of illness or death in the family. Appropriate notification of absences due to university-related trips is required prior to the absence.

### **Academic Integrity**

Per university policy, students shall not plagiarize, cheat, or falsify or misuse academic records. Students are expected to adhere to University policy on cheating and plagiarism in all courses. The minimum penalty for a first offense is a zero on the assignment on which the offense occurred. If the offense is considered severe or the student has other academic offenses on their record, more serious penalties, up to suspension from the university may be imposed.

Plagiarism and cheating are serious breaches of academic conduct. Each student is advised to become familiar with the various forms of academic dishonesty as explained in the Code of Student Rights and Responsibilities. Complete information can be found at the following website: <http://www.uky.edu/Ombud>. A plea of ignorance is not acceptable as a defense against the charge of academic dishonesty. It is important that you review this information as all ideas borrowed from others need to be properly credited.

Part II of *Student Rights and Responsibilities* (available online)

<http://www.uky.edu/StudentAffairs/Code/part2.html>) states that all academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where students feel unsure about the question of plagiarism involving their own work, they are obliged to consult their instructors on the matter before submission.

When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording or anything else from another source without appropriate acknowledgement of the fact, the students are guilty of plagiarism. Plagiarism includes reproducing someone else's work, whether it be a published article, chapter of a book, a paper from a friend or some file, or something similar to this. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work which a student submits as his/her own, whoever that other person may be.

Students may discuss assignments among themselves or with an instructor or tutor, but when the actual work is done, it must be done by the student, and the student alone. When a student's assignment involves research in outside sources of information, the student must carefully acknowledge exactly what, where and how he/she employed them. If the words of someone else are used, the student must put quotation marks around the passage in question and add an appropriate indication of its origin. Making simple changes while leaving the organization, content and phraseology intact is plagiaristic. However, nothing in these Rules shall apply to those ideas which are so generally and freely circulated as to be a part of the public domain (Section 6.3.1).

**Please note:** Any assignment you turn in may be submitted to an electronic database to check for plagiarism.

#### **Accommodations due to disability**

If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (Room 2, Alumni Gym, 257-2754, email address: [jkarnes@email.uky.edu](mailto:jkarnes@email.uky.edu)) for coordination of campus disability services available to students with disabilities.

**CHE-250**  
**FORENSIC SCIENCE ON TELEVISION**  
**University of Kentucky, Chemistry Department**  
**Spring Semester, 20xx**

**Tentative Lecture Schedule**

<b><u>Topic</u></b>	<b><u>Saferstein Chapter(s)</u></b>
I. Introduction	1
II. Crime Scene and Evidence Collection <ul style="list-style-type: none"><li>• Collection and preservation of evidence</li><li>• Basic types of physical evidence/identification</li></ul>	2 & 3
III. Methods of Forensic Science I <ul style="list-style-type: none"><li>• Glass and Soil</li><li>• Organic Analysis</li><li>• Separation and Identification</li></ul>	4 & 5
III. Methods of Forensic Science II <ul style="list-style-type: none"><li>• Inorganic Analysis</li><li>• Atomic Emission and Absorption Spectrometry</li><li>• Mass Spectrometry</li></ul>	6
IV. Trace Evidence <ul style="list-style-type: none"><li>• Analysis of hair, fibers and pigments</li></ul>	7,13
V. Toxicology <ul style="list-style-type: none"><li>• Drug Identification and Quantification</li><li>• Poison Identification and Quantification</li></ul>	8,9
VI. Serology and DNA Typing <ul style="list-style-type: none"><li>• Forensic Characterization of DNA</li></ul>	10,11