**CHE 113: Forensic Science  
 2017-2018**



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**COURSE INFORMATION**

*SU Course Website at* [*http://supa.syr.edu/Subjects/Chemistry/syllabi/*](http://supa.syr.edu/Subjects/Chemistry/syllabi/)

**Course Description and Prerequisite Skills**

Chemistry 113, Introduction to Forensic Science, is focused upon the application of scientific methods and techniques to crime and law. Recent advances in scientific methods and principles have had an enormous impact upon science, law enforcement and the entire criminal justice system. In this course, scientific methods specifically relevant to crime detection and analysis will be presented. Emphasis is placed upon understanding the science underlying the techniques used in evaluating physical evidence. Topics included are blood analysis, organic and inorganic evidence analysis, fingerprints, hair analysis, DNA, drug chemistry, forensic medicine, forensic anthropology, toxicology, fiber comparisons, soil comparisons, and fire and engineering investigations, among others.

**Learning Goals**

Scientific methods are radically changing the landscape of our criminal justice system. Increasingly, law enforcement and legal prosecution are reliant upon often complex and detailed scientific analysis of forensic evidence. This course is intended to provide an introduction to understanding the science behind crime detection. This will be accomplished by providing a rational basis for interpreting the scientific analysis of forensic evidence and through occasional relevant case studies. Laboratory exercises will include techniques commonly employed in forensic investigations.

**Materials and Responsibilities**

**Required Text:** *Criminalistics* (Introduction to Forensic Science) by Richard Saferstein

**Supplemental Text-** *Introduction to Forensic Science: The Science of Criminalistics* by James T. Spencer forthcoming from Cengage Learning.

[*http://Moodle.supa.syr.edu*](http://Moodle.supa.syr.edu)

**username:**

**password:**

**Information about the Syracuse University Project Advance (SUPA) Program**

* S.U.P.A. began in 1972 and is a cooperative effort between Syracuse University and high schools throughout the Northeast. It provides qualified high school students with the opportunity to enroll in challenging university courses that are offered in the convenience of their own schools.
* The 2010-2011 rate for Project Advance students is $112 per credit ($448 overall), which sharply contrasts the regular S.U. rate of $1,074 per credit
* *Successful* *credit-enrolled* *completion* of the CHE 113 Forensic Science course provides the student with 4 undergraduate Syracuse University credits (which is documented on an actual transcript from SU).

**Other Information**

The material covered in lecture will be illustrative rather than exhaustive. *You should read the material in the text assigned* ***before*** *the lecture*. In lecture, alternate ways of understanding the material will often be presented. The examinations, however, will cover **both the assigned text and lecture materials**. Plenty of help is available to answer questions and provide assistance with problems. An **approximate** schedule of class lecture topics and the assigned text is included with this syllabus (please note that it is only an **approximate schedule**).

**ELECTRONICS POLICY**

Upon entering my classroom ALL electronic devices are to be TURNED OFF/SILENCED and put AWAY. That means I do not want to see or hear your devices. If they are found in use without permission, you will get written up. **Consider this your only warning!!**

\*\* There may be times in class when using a cell phone or iPod will be allowed (ie: research on a topic, while working on a project in class, etc). I will let you know when they can be used. Remember: Using an iPod or cell phone in class is a PRIVILEGE! If I see you abusing this privilege, you will no longer be allowed to participate at any time.

**Grading Policy**

Final grades will be assigned based upon exams, projects, laboratory grades and a comprehensive final examination.

**Forms of assessment:**

* + Unit exams (approximately 2-3 per marking period)
  + Quizzes
  + Lab Reports
  + Projects
  + Critical thinking/ crime solving assignments

*\*\*\*\*\* This note is a policy of Syracuse University*

**NOTE: There will be no make-up examinations.**

***However, there will be times when students at RBR may miss a test/quiz. If so, they must be made up the day the student returns to school. Students are expected to be present for all tests and labs. An absence must be excused for a student to be eligible to make up an exam!***

**Laboratory**

In order to pass CHE 113, a student must have a passing grade in the laboratory portion of the course. Attendance in laboratory is mandatory. Students are expected to arrive promptly at the beginning of the lab period and not leave until that particular experiment is completed. If a student misses a lab, the lab must be made up within one week. Please make arrangements with Mrs. Klatt for a make-up appointment.

*(Syracuse University Laboratory rule: Arranging a second “event” requiring the student’s presence outside of CHE 113 laboratory during the scheduled lab period is* ***not allowed*** *by University rules.)*

**Attendance and Participation Policy**

1. Students who may need special consideration due to a physical or learning disability should see the instructor as soon as possible. **No provisions** will be made if notified **after** examinations.
2. No student will be refused admission because he or she is unable to participate in a course requirement because of his or her religious holy day requirements. Again, you must make provisions **before** such absences. According to University policy, “an opportunity to make up examinations and other class work [due to religious observances] will be provided...if the **instructor is notified in writing one week before the absence**.”
3. Attendance in class is always expected! Extensive absences will have a negative impact on your success in this class!
4. Missed classwork is **YOUR RESPONSIBILITY!** There is a “missed work” basket on the table in the front of room 313. All handouts are placed in this basket at the conclusion of each class. This is the first place to look following an absence.
5. Tests are to be made up after school or during study hall. Make ups *may not* occur during your recitation or regular class time!
6. **All assignments must be handed in on-time! No credit will be given for assignments that are late.**
7. Excuses from class - especially lab - for medical reasons will only be given if such absences are advised by a health care provider. Verification must be made in writing.

**Syracuse University Policies on Academic Integrity**

Syracuse University’s Academic Integrity Policy holds students accountable for the integrity of the work they submit. Students should be familiar with the policy and know that it is their responsibility to learn about course-specific expectations, as well as about university policy. The university policy governs appropriate citation and use of sources and the integrity of work submitted in exams and assignments. The policy also prohibits students from submitting the same written work in more than one class without receiving written authorization in advance from both instructors. The presumptive penalty for a first offense by a student is course failure, accompanied by a transcript notation indicating that the failure resulted from a violation of Academic Integrity Policy. For more information and the complete policy, see [http://academicintegrity.syr.edu](http://academicintegrity.syr.edu/).

*Red Bank Regional High School also maintains an Academic Integrity Policy as noted in student handbook on school website* [*www.rbrhs.org*](http://www.rbrhs.org)

**Academic Accommodations**

Syracuse University welcomes people with disabilities and, in compliance with the Rehabilitation Act of 1973 and the Americans with Disabilities Act, does not discriminate on the basis of disability.  Students who require special consideration due to a learning or physical disability or other situation should make an appointment with the course instructor as soon as possible.

**Student Work**

It is understood that registration for and continued enrollment in this course constitutes permission by the student for the instructor to use for educational purposes any student work produced in the course, in compliance with the federal Family Educational Rights and Privacy Act  (FERPA).  After the completion of the course, any further use of student work will meet one of the following conditions: (1) the work will be rendered anonymous through the removal of all personal identification of the student(s); or (2) written permission from the student(s).

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| IR Heroin | **Introduction to Forensic Science: The Science of Criminalistics**  *James T. Spencer, Syracuse University* |  |

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**CHE 113: Forensic Science LAB**

Rules and Regulations

1. You will work in pairs in the laboratory, but you are required and responsible for doing your own laboratory write-up.

2. Students are expected to complete their lab on their assigned day and hand-in the laboratory write-up on the due date.

3. **Attendance is mandatory**. Each student is expected to present at the start of the laboratory, during this time the experimental set-up and safety procedures for each lab is discussed by the instructors.

4. Each person is responsible for wiping down his/her work area with a damp sponge or paper towel and washing all glassware with soap and water at the end of each lab period.

5. If you are in violation of any safety guidelines, you will be asked to remedy the situation only once. The next time you will be asked to leave lab for that day. There will be no make-up labs.

Safety Guidelines

1. Safety glasses must be worn at all times while in lab. You will be given one warning. If it happens a second time you will be asked to leave lab and you will receive a zero for the lab.

2. Do not wear contacts in lab. Wear your glasses.

3. If glassware breaks and/or chemicals spill, inform the instructor. Do not try and clean the spill and/or glass yourself.

4. If you cut/burn yourself and/or spill anything on your clothing and/or skin in lab, inform the instructor immediately.

5. Long hair must be tied back.

6. Avoid wearing loose clothing and jewelry.

7. Wash your hands before leaving lab and going to the bathroom.

8. Do not sit on the lab tables.

9. Do not eat or drink in lab at any time.

10. No open-toed shoes, sandals or shorts may be worn in lab at any time.

11. Use the disposable gloves provided when required and change them frequently.