

**JOHN JAY COLLEGE OF CRIMINAL JUSTICE**  
**The City University of New York**  
**524 West 59<sup>th</sup> Street, New York, NY, 10019**  
**Concepts of Forensic Science**  
**Forensic Science 108 Lecture Syllabus**  
**Fall 2012**

**General Course Info**

Course Name: Concepts of Forensic Science (FOS108)

Semester: Fall 2012

Sections: 17, 18 & 19

Day(s): Tuesday & Thursdays

Time: 8:30 – 9:45pm

Location: New Building L2.85

**Instructor Information**

Professor Mica-Mia Cartwright

Office: New Building 05.66.20

Office hours: Tuesdays and Thursdays 3pm-6pm

Or by appointment

Phone Number: 212-621-3751

E-mail address: [mcartwright@jjay.cuny.edu](mailto:mcartwright@jjay.cuny.edu)

**Course description**

This course provides the non-science major with an introduction to forensic science. The lecture portion of the course establishes a foundation for understanding many of the concepts and techniques on which forensic science is built, such as those associated with crimes scene processing, physical evidence, microscopy, fingerprints, firearms and DNA. The laboratory portion of the course provides an opportunity to learn “hands-on” by using common analytical techniques.

**Learning Outcomes**

Reasoning:

- Determine appropriate conclusions based on scientific evidence. Be able propose a prediction of results and then test predictions.

- Students will be able to recognize that identifying specific unknown samples can be accomplished through the use of different scientific techniques and testing.
- Apply critical thinking skills in solving justice problems of a specific nature by discussing relevant court cases and the impact of science within.
- Discriminate between generally accepted science and science fiction.

Knowledge:

- Take a skeptic approach to general scientific information and legal decisions.
- Describe how data influences legal decisions and shapes methods of analysis.
- Gain an introduction to physical sciences necessary for forensic science.
- Students will learn aspects of general chemistry, analytical chemistry (chromatography), and biology (serology).

Practical Skills:

- Write scientific reports, and follow scientific procedures to obtain standardized replicable results.
- Identify unknown samples in double blind studies.
- Describe how science is used in the criminal justice system

Communication:

- Report on importance/impact, relevancy and accuracy of forensic science methods.
- Use scientific vocabulary in defending results and active discussions about science.

**Course Prerequisites or Co-requisites**

Prerequisite: Natural Science 107. Unless you have fulfilled certain high school science requirements, you will not be permitted to take this course without having taken natural science 107.

**Lecture Requirements**

- Quizzes may be given at any point during the semester and may be unannounced. Quizzes will be given during the first ten minutes of the lecture session. If you are late, you will not be allowed to take the quiz. There are no makeup quizzes.
- All readings must be done **PRIOR** to class.
- Attendance is required for lecture. A total of **three** or more unexcused absences will adversely affect your grade. Students are responsible for signing the attendance sheet and will be considered absent if they do not. Whoever has not expressed attendance within the first 15 minutes or arrives later will be counted as late. **Two** lateness marks will equal **one** absence. Students arriving late must

contact the instructor at the end of the session **before** leaving the lecture.

- Cell/Smart phone usage is **not** permitted in lecture and must be **turned off or placed on silent** (not vibrate). Texting or messaging during class is strictly forbidden. During an exam the usage of a cell phone or texting will result in a zero for that exam. If the student needs to use the phone they can leave the room. If caught using the phone in the room the student will be asked to leave to room and upon multiple infractions may be barred from the class for that session and marked absent.
- We cannot guarantee any makeup exams.
- Students are required to address their professors and each other with respect. This applies to in and outside of the classroom and also in electronic communications.

### **Laboratory Sections:**

#### **Section 17**

Days: Tuesdays & Thursdays

Time: 7:05pm-8:20pm

Location: New Building 3.74

Instructor: **Professor K. Jakob\*\***

**\*\*Grading for lab section will be done in accordance with the Lab Instructor's policy.**

#### **Section 18**

Days: Tuesdays & Thursdays

Time: 7:05pm-8:20pm

Location: New Building 3.75

Instructor: Professor Mica-Mia Cartwright\*

\*Grading for lab section will be done in accordance with the grading policy listed in this syllabus (see lab syllabus).

#### **Section 19**

Days: Mondays & Wednesdays

Time: 7:05pm-8:20pm

Location: New Building 3.74

Instructor: **Professor T. Bedford\*\***

**\*\*Grading for lab section will be done in accordance with the Lab Instructor's policy.**

## **Lecture Required Text**

Johll, M. (2013). *Investigating chemistry: introductory chemistry from a forensic science perspective*. New York: W.H. Freeman.

ISBN: 9781429255226

## **Grading**

Your lecture grade is worth **60%** of your course grade and laboratory grade is worth **40%**. Quizzes, exams, attendance and participation all are part of your lecture grade.

### Lecture Grade

Best 3 Exams – 87% (29% each)

Quizzes – 10%

Attendance & Participation – 3%

### Extra Credit

If you have **perfect attendance** for lecture and lab sections, **extra credit** will be given.

### Lecture Exams

The four lecture exams will NOT be cumulative. You must bring your JJC ID Card in order to take each exam. You will not be permitted to take an exam if you arrive more than 15 minutes after the exam has begun. Bring at least two #2 pencils, an eraser and a pen to each exam. **NO MAKE-UP EXAMS WILL BE GIVEN**. Students are required to take **all four** lecture exams. The lowest of the four grades will be dropped; the remaining three exam grades will be weighted equally. During examinations, students may not use any extraneous reference materials (e.g. books, notes, papers), communicate with other students, or use electronic devices such as phones, pagers, or PDA's. Any student caught cheating will receive a zero for the exam, and be referred to the College's Academic Integrity Officer for further action.

### Grading Scale

A = 93 – 100%	A- = 90- 92.99%	B+ = 87-89.99%
B = 83-86.99%	B- = 80-82.99%	C+ = 77-79.99%
C = 73-76.99%	C- = 70-72.99%	D+ = 67-69.99%
D = 63-66.99%	F = 62.99% and below	

## **Final Exam**

The final exam will be held on **December 20<sup>th</sup>, 2012** at **8 pm** in Room L2.85 of the New Building.

## **College wide policies for undergraduate courses**

(see the *Undergraduate Bulletin*, Chapter IV Academic Standards)

- A. **Incomplete Grade Policy**
- B. **Extra Work During the Semester**
- C. **Americans with Disabilities Act (ADA) Policies**

“Qualified students with disabilities will be provided reasonable academic accommodations if determined eligible by the Office of Accessibility Services (OAS). Prior to granting disability

accommodations in this course, the instructor must receive written verification of a student's eligibility from the OAS which is located at L66 in the New Building (212-237-8031). It is the student's responsibility to initiate contact with the office and to follow the established procedures for having the accommodation notice sent to the instructor."

Source: *Reasonable Accommodations: A Faculty Guide to Teaching College Students with Disabilities*, 4<sup>th</sup> ed., City University of New York, p.3.  
([http://www.jjay.cuny.edu/studentlife/Reasonable\\_Accommodations.pdf](http://www.jjay.cuny.edu/studentlife/Reasonable_Accommodations.pdf))

### **Statement of the College Policy on Plagiarism**

Plagiarism is the presentation of someone else's ideas, words, or artistic, scientific, or technical work as one's own creation. Using the ideas or work of another is permissible only when the original author is identified. Paraphrasing and summarizing, as well as direct quotations require citations to the original source.

The following are some examples of plagiarism, but by no means is it an exhaustive list:

- Copying another person's actual words without the use of quotation marks and footnotes attributing the words to their source
- Presenting another person's ideas or theories in your own words without acknowledging the source
- Using information that is not common knowledge without acknowledging the source
- Failing to acknowledge collaborators on homework and laboratory assignments

**Internet plagiarism** includes submitting downloaded term papers or part of term papers, paraphrasing or copying information from the Internet without citing the source, and "cutting and pasting" from various sources without proper attribution.

Plagiarism may be intentional or unintentional. Lack of dishonest intent does not necessarily absolve a student of responsibility for plagiarism.

It is the student's responsibility to recognize the difference between statements that are common knowledge (which do not require documentation) and restatements of the ideas of others. Paraphrase, summary, and direct quotation are acceptable forms of restatement, as long as the source is cited.

Students, who are unsure how and when to provide documentation, are advised to consult with their instructors. The Library has free guides designed to help students with problems of documentation. (*John Jay College of Criminal Justice Undergraduate Bulletin*, <http://www.jjay.cuny.edu/academics/654.php>, see Chapter IV Academic Standards)

### **Counseling Services Center (212.237.8111)**

The Counseling Services Center offers assistance and referral to address students' personal, social, career, and study skills problems.

Services for students include: "personal counseling, adjustment to college, career and personal development, choosing a major, study habits, test anxiety, low self-esteem, family and relationship concerns, depression and grief."

Approved by College Council, November 18, 2011

For more information visit <http://www.jjay.cuny.edu/2246.php>

**Security:**

For **EMERGENCIES ONLY**: Dial Extension **8888** from a university telephone or **(212) 237-8888** from a non-university phone.

In the case of an emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building.

\*Evacuation Procedures for New Building: <http://www.jjay.cuny.edu/5613.php>

All students will abide by the instructions of John Jay Department of Public Safety or any other NY first responder

Please review the university's Emergency Plan: <http://www.jjay.cuny.edu/1523.php>

### Tentative Schedule\* (subject to change)

Weekday	Date	Lecture Topics	Readings
Tuesday	28-Aug-12	Introduction/Math Refresher	
Thursday	30-Aug-12	Introduction to Forensic Chemistry	Chapter 1 (pp. 3-25)
Tuesday	4-Sep-12	Evidence Collection and Preservation	Chapter 2 (pp. 27-48)
Thursday	6-Sep-12	Chromatography	Pages. 10-11 & Chapter 9 section 9.9 (pp. 282-285)
Tuesday	11-Sep-12	Light and Matter	TBD
Thursday	13-Sep-12	Microscopy	TBD
Tuesday	18-Sep-12	<b>NO CLASS</b>	
Thursday	20-Sep-12	<b>REVIEW</b>	
Tuesday	25-Sep-12	<b>NO CLASS</b>	
Thursday	27-Sep-12	<b>EXAM 1</b>	STUDY!
Tuesday	2-Oct-12	Hairs and Fibers	TBD
Thursday	4-Oct-12	Structure of Drugs	Chapter 5 ( pp. 135-158)
Tuesday	9-Oct-12	Properties of Solutions – aqueous	Chapter 6 (pp. 165-188)
Thursday	11-Oct-12	Drug Chemistry	Chapter 8 (pp. 225-254)
Tuesday	16-Oct-12	Chemical Equilibrium and Poisons	Chapter 13
Thursday	18-Oct-12	Intro to Biochemistry and DNA Analysis	Chapter 14 Chapter 1 from <i>Fundamentals of Forensic DNA Typing</i> by John Butler
Tuesday	23-Oct-12	<b>REVIEW</b>	
Thursday	25-Oct-12	<b>EXAM 2</b>	STUDY!
Tuesday	30-Oct-12	Fingerprints	TBD
Thursday	1-Nov-12	Questioned Documents	TBD
Tuesday	6-Nov-12	Impressions	TBD
Thursday	8-Nov-12	Firearms and Toolmarks	TBD
Tuesday	13-Nov-12	Anthropology/Pathology	Reading provided by instructor from <i>Human Osteology: A laboratory and field manual</i> by William M. Bass
Thursday	15-Nov-12	<b>REVIEW</b>	
Tuesday	20-Nov-12	<b>EXAM 3</b>	STUDY!
Thursday	22-Nov-12	<b>NO CLASS</b>	
Tuesday	27-Nov-12	Chemistry of Fire and Heat	Chapter 9 (pp. 261-288)
Thursday	29-Nov-12	Chemistry of Explosions	Chapter 10 (pp. 293-318)
Tuesday	4-Dec-12	Nuclear Chemistry – energy, medicine, weapons	Chapter 12 (pp. 345-370)
Thursday	6-Dec-12	Glass and Soil	Chapter 2 sections 2.9 & 2.10
Tuesday	11-Dec-12	TBD	
Thursday	13-Dec-12	<b>Reading Day</b>	<b>Reading Day</b>
Tuesday	18-Dec-12	<b>Finals Week</b>	<b>STUDY!</b>
Thursday	20-Dec-12	<b>FINAL EXAM @ 8pm</b>	<b>STUDY!</b>

Unless otherwise indicated, all readings are from “*Investigating chemistry: Introductory Chemistry from a Forensic Science Perspective*”.

16-Oct	04-Oct	Stereochemistry: chiral molecules
23-Oct	11-Oct	Ionic reactions-nucleophilic substitution and elimination
30-Oct	18-Oct	Ionic reactions-nucleophilic substitution and elimination
06-Nov	25-Oct	Alkenes and Alkynes I: Properties and Synthesis.
13-Nov	01-Nov	Alkenes and Alkynes II: Properties and Synthesis.
20-Nov	08-Nov	IR spectroscopy
27-Nov	15-Nov	Nuclear Magnetic Resonance and Mass Spectrometry: Tools etc.
04-Dec	29-Nov	Nuclear Magnetic Resonance and Mass Spectrometry: Tools etc.
11-Dec	06-Dec	Radical Reaction

09-Oct	27-Sep	<b>Exp 5A,B</b> Thin-Layer Chromatography	42 - 46	Technique 20
16-Oct	04-Oct	<b>Exp 5C</b> Thin-Layer Chromatography	46 - 48	Technique 11, 20
23-Oct	11-Oct	<b>Exp 14</b> (+) and (-) Carvones Extraction from Caraway and Spearmint	108 - 116	Techniques 7.10, 12.4, 12.9, 18
30-Oct	18-Oct	<b>Exp 15</b> (+) and (-) Carvones HPLC and IR Analysis	119 - 131	Techniques 21, 25
06-Nov	25-Oct	<b>Exp 35A</b> Oxidation-Reduction Scheme: Borneol, Camphor, Isoborneol, IR analysis	288 - 295	Techniques 7.1 - 7.4, 7.10, 8.3, 9.7, 9.8, 12.4, 25
13-Nov	01-Nov	<b>Exp 35B</b> Oxidation-Reduction Scheme: Borneol, Camphor, Isoborneol, IR analysis	295	Techniques 7.1 - 7.4, 7.10, 8.3, 9.7, 9.8, 12.4, 25
20-Nov	08-Nov	<b>Exp 21A, B</b> Nucleophilic Substitution Reactions: Competitive Nucleophiles	180 - 187	Techniques 7.2, 7.4, 7.5, 7.8, 12.5, 12.9, 12.11
27-Nov	15-Nov	<b>Exp 21A, B</b> Nucleophilic Substitution Reactions: Competitive Nucleophiles	187	Technique 22
04-Dec	29-Dec	<b>Exp 54C,H</b> Tests for Organic Substances: Unsaturation and Alcohols	466 - 469 486 - 491	Technique 10
11-Dec	06-Dec	<b>Lab Final</b> , Check out	n/a	Review all materials
<b>Tuesday</b>	<b>Thursday</b>	<b>Laboratory Experiment</b>	<b>Procedure Pages</b>	<b>Required Reading</b>

**Last day to drop the class without academic penalty: Friday November 9<sup>th</sup>!**

TUESDAY	THURSDAY	MATERIAL TO BE REVIEWED
28-Aug	30-Aug	Carbon compounds and chemical bonds
04-Sep	06-Sep	Hydrocarbons: representative alkanes, etc.
11-Sep	13-Sep	An introduction to organic reaction: Acids and bases
02-Oct	20-Sep	Alkanes: nomenclature, conformational analysis, etc
09-Oct	27-Sep	Alkanes: nomenclature, conformational analysis, etc

**JOHN JAY COLLEGE OF CRIMINAL JUSTICE**  
**The City University of New York**  
**524 West 59<sup>th</sup> Street, New York, NY, 10019**  
**Concepts of Forensic Science**  
**Forensic Science 108 Laboratory Syllabus**  
**Fall 2012**

**General Course Info**

Course Name: Concepts of Forensic Science (FOS108)

Semester: Fall 2012

Section: 18

Day(s): Tuesday & Thursdays

Time: 7:05 – 8:20pm

Location: New Building 3.75

**Instructor Information**

Professor Mica-Mia Cartwright

Office: New Building 05.66.20

Office hours: Tuesdays and Thursdays 3pm-6pm

Or by appointment

Phone Number: 212-621-3751

E-mail address: [mcartwright@jjay.cuny.edu](mailto:mcartwright@jjay.cuny.edu)

**Course description**

This course provides the non-science major with an introduction to forensic science. The lecture portion of the course establishes a foundation for understanding many of the concepts and techniques on which forensic science is built, such as those associated with crimes scene processing, physical evidence, microscopy, fingerprints, firearms and DNA. The laboratory portion of the course provides an opportunity to learn “hands-on” by using common analytical techniques.

**Learning Outcomes**

Reasoning:

- Determine appropriate conclusions based on scientific evidence. Be able propose a prediction of results and then test predictions.

- Students will be able to recognize that identifying specific unknown samples can be accomplished through the use of different scientific techniques and testing.
- Apply critical thinking skills in solving justice problems of a specific nature by discussing relevant court cases and the impact of science within.
- Discriminate between generally accepted science and science fiction.

Knowledge:

- Take a skeptic approach to general scientific information and legal decisions.
- Describe how data influences legal decisions and shapes methods of analysis.
- Gain an introduction to physical sciences necessary for forensic science.
- Students will learn aspects of general chemistry, analytical chemistry (chromatography), and biology (serology).

Practical Skills:

- Write scientific reports, and follow scientific procedures to obtain standardized replicable results.
- Identify unknown samples in double blind studies.
- Describe how science is used in the criminal justice system

Communication:

- Report on importance/impact, relevancy and accuracy of forensic science methods.
- Use scientific vocabulary in defending results and active discussions about science.

**Course Prerequisites or Co-requisites**

Prerequisite: Natural Science 107. Unless you have fulfilled certain high school science requirements, you will not be permitted to take this course without having taken natural science 107.

**Requirements**

- Attendance is required for laboratory sections. A total of **two or more** unexcused absences will adversely affect your grade. Students are responsible for signing the attendance sheet and will be considered absent if they do not. If you miss a lab, you will receive a grade of zero for that lab. Whoever has not expressed attendance within the first 15 min or arrives later will be counted as late. **Two** lateness marks will equal **one** absence. Students arriving late must contact the instructor at the end of the session **before** leaving the lab.
- All readings must be completed prior to attending laboratory.
- Cell/Smart phone usage is **not** permitted in lab and must be **turned off or placed on silent** (not vibrate). Texting or messaging during class is strictly

forbidden. During an exam the usage of a cell phone or texting will result in a zero for that exam. If the student needs to use the phone they can leave the room. If caught using the phone in the room the student will be asked to leave to room and upon multiple infractions may be barred from the class for that session and marked absent.

- **NO FOOD** or **DRINK** is permitted in lab. Eating, drinking and chewing gum are **NOT** permitted in lab. If you break any of these rules, you will be forced to leave lab, receive an absence for the day and receive a zero on your lab assignment!
- We cannot guarantee any makeup labs.
- Students are required to observe **all** safety rules, including wearing safety glasses during lab work and cleanup. **Failure to possess and wear safety glasses is inexcusable. Safety glasses are mandatory for all lab sessions including recitations! The minimum penalty for not having or wearing your goggles is a zero for the lab and dismissal from the period with a marked absence**
- Proper laboratory attire is mandatory. Deviation from the guidelines presented in the safety list will lead to a dismissal from the period and a mark of absent. **Students MUST wear long pants, shirts with sleeves, and closed-toe shoes at all times when working in the laboratory. Students who are dressed inappropriately will be sent home to change and given a late/absence for that day. Additionally, females must wear socks if wearing flats (ballet flats). Hair must be tied back away from the student's face.**
- Students are required to address their professors and each other with respect. This applies to in and outside of the classroom and also in electronic communications.

### **Required Texts and Materials for Laboratory**

#### Lab Manual

Kubic, T & N. Petraco. (2009). *Forensic science laboratory manual and workbook*. Boca Raton, FL: Taylor & Francis.

ISBN: 9781420087192

Custom edition for John Jay College of Criminal Justice available at bookstore

Marble notebook and lab safety glasses **needed** for lab. Available at bookstore

## **Grading**

Your laboratory grade is worth **40%** of your total FOS 108 grade (60% for lecture portion).

The lab grade will consist of:

Lab notebooks (**30%**),  
General unknowns (**30%**)  
Enhanced lab report (**10%**),  
Final exam (**30%**).

### **Grading Scale**

A = 93 – 100%	A- = 90- 92.99%	B+ = 87-89.99%
B = 83-86.99%	B- = 80-82.99%	C+ = 77-79.99%
C = 73-76.99%	C- = 70-72.99%	D+ = 67-69.99%
D = 63-66.99%	F = 62.99% and below	

## **College wide policies for undergraduate courses**

(see the *Undergraduate Bulletin*, Chapter IV Academic Standards)

- A. **Incomplete Grade Policy**
- B. **Extra Work During the Semester**
- C. **Americans with Disabilities Act (ADA) Policies**

“Qualified students with disabilities will be provided reasonable academic accommodations if determined eligible by the Office of Accessibility Services (OAS). Prior to granting disability accommodations in this course, the instructor must receive written verification of a student’s eligibility from the OAS which is located at L66 in the New Building (212-237-8031). It is the student’s responsibility to initiate contact with the office and to follow the established procedures for having the accommodation notice sent to the instructor.”

Source: *Reasonable Accommodations: A Faculty Guide to Teaching College Students with Disabilities*, 4<sup>th</sup> ed., City University of New York, p.3.  
([http://www.jjay.cuny.edu/studentlife/Reasonable\\_Accommodations.pdf](http://www.jjay.cuny.edu/studentlife/Reasonable_Accommodations.pdf))

## **Statement of the College Policy on Plagiarism**

Plagiarism is the presentation of someone else’s ideas, words, or artistic, scientific, or technical work as one’s own creation. Using the ideas or work of another is permissible only when the original author is identified. Paraphrasing and summarizing, as well as direct quotations require citations to the original source.

The following are some examples of plagiarism, but by no means is it an exhaustive list:

- Copying another person’s actual words without the use of quotation marks and footnotes attributing the words to their source
- Presenting another person’s ideas or theories in your own words without acknowledging the source
- Using information that is not common knowledge without acknowledging the source
- Failing to acknowledge collaborators on homework and laboratory assignments

**Internet plagiarism** includes submitting downloaded term papers or part of term papers, paraphrasing or copying information from the Internet without citing the source, and “cutting and pasting” from various sources without proper attribution.

Plagiarism may be intentional or unintentional. Lack of dishonest intent does not necessarily absolve a student of responsibility for plagiarism.

It is the student’s responsibility to recognize the difference between statements that are common knowledge (which do not require documentation) and restatements of the ideas of others. Paraphrase, summary, and direct quotation are acceptable forms of restatement, as long as the source is cited.

Students, who are unsure how and when to provide documentation, are advised to consult with their instructors. The Library has free guides designed to help students with problems of documentation. (*John Jay College of Criminal Justice Undergraduate Bulletin*, <http://www.jjay.cuny.edu/academics/654.php>, see Chapter IV Academic Standards)

**Counseling Services Center (212.237.8111)**

The Counseling Services Center offers assistance and referral to address students' personal, social, career, and study skills problems.

Services for students include: “personal counseling, adjustment to college, career and personal development, choosing a major, study habits, test anxiety, low self-esteem, family and relationship concerns, depression and grief.”

For more information visit <http://www.jjay.cuny.edu/2246.php>

**Security:**

For **EMERGENCIES ONLY**: Dial Extension **8888** from a university telephone or **(212) 237-8888** from a non-university phone.

In the case of an emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building.

\*Evacuation Procedures for New Building: <http://www.jjay.cuny.edu/5613.php>

All students will abide by the instructions of John Jay Department of Public Safety or any other NY first responder

Please review the university’s Emergency Plan: <http://www.jjay.cuny.edu/1523.php>

### Tentative Schedule\* (subject to change)

Weekday	Date	Lab	Readings
Tuesday	28-Aug-12	Introduction/Math Refresher/ Documentation	Safety Rules Page: xxi Experiment 1: Pages 3-10
Thursday	30-Aug-12	Documentation/Chemistry Discussion	Experiment 1: Pages 3-10
Tuesday	4-Sep-12	Identification/Individualization	Experiment 2: Pages 11-16
Thursday	6-Sep-12	Identification/Individualization Chromatography Discussion	Experiment 2: Pages 11-16 Experiment 21: Pages 155-157
Tuesday	11-Sep-12	Chromatography Lab	Experiment 21: Pages 155-157 Experiment 32: Pages 265-273
Thursday	13-Sep-12	Chromatography Lab	Experiment 21: Pages 155-157 Experiment 32: Pages 265-273
Tuesday	18-Sep-12	<b>NO CLASS</b>	
Thursday	20-Sep-12	Chromatography Lab/Microscopy Discussion	Experiments 3 & 4: Pages 17-29 Experiment 10: Pages 69-75 Experiment 13: Pages 95-100
Tuesday	25-Sep-12	<b>NO CLASS</b>	
Thursday	27-Sep-12	Microscopy Lab	See readings for 20-Sep-2012
Tuesday	2-Oct-12	Microscopy Lab/Hairs and Fibers Discussion	Experiment 14: Pages 101-109 Experiments 11 & 12: Pages 77-94
Thursday	4-Oct-12	Hairs and Fibers Lab	See readings for 2-Oct-2012
Tuesday	9-Oct-12	Hairs and Fibers Lab	See readings for 2-Oct-2012
Thursday	11-Oct-12	Hairs and Fibers Lab	See readings for 2-Oct-2012
Tuesday	16-Oct-12	Trace Lab	Experiment 9: Pages 61-68
Thursday	18-Oct-12	Serology Discussion & Lab	TBD
Tuesday	23-Oct-12	Serology Lab	TBD
Thursday	25-Oct-12	Fingerprint Discussion & Lab	Experiment 5: Pages 31-40 Experiment 6: Pages 41-45 Experiment 7: Pages 47-52
Tuesday	30-Oct-12	Fingerprint Lab	See readings for 30-Oct-2012
Thursday	1-Nov-12	Fingerprint Lab	See readings for 30-Oct-2012
Tuesday	6-Nov-12	Forgery Detection Discussion & Lab	Experiment 24: Pages 171-178
Thursday	8-Nov-12	Ballistics Discussion & Lab	Experiments 37 & 38: Pages 307-333
Tuesday	13-Nov-12	Odontology Lab	Experiments 26 & 27: Pages 187-211
Thursday	15-Nov-12	Crime Scene	Experiment 8: Pages 53-59 Experiment 39: Pages 335-342
Tuesday	20-Nov-12	Crime Scene	Experiment 8: Pages 53-59 Experiment 39: Pages 335-342
Thursday	22-Nov-12	<b>NO CLASS</b>	
Tuesday	27-Nov-12	<b>LAB FINAL EXAM</b>	
Thursday	29-Nov-12	General Unknowns	
Tuesday	4-Dec-12	General Unknowns	
Thursday	6-Dec-12	General Unknowns	
Tuesday	11-Dec-12	General Unknowns	
Thursday	13-Dec-12	<b>Reading Day</b>	
Tuesday	18-Dec-12	<b>Finals Week</b>	
Thursday	20-Dec-12	<b>Finals Week</b>	

All readings are from *Forensic Science Laboratory Manual and Workbook* unless otherwise indicated.