DRUG IDENTIFICATION LAB  
FSC 440L  
Fall 2017  
Arthell Kelley Hall 107 & 108A  
Friday 8:00-9:45 am; 10:00-11:45 am

CONTACTING YOUR INSTRUCTOR  
Instructor: Dr. Xuyang He  
Office: AKH 104  
Office hours: Mon & Wed 9 am -12 pm, 1-3 pm  
Email: xuyang.he@usm.edu

TEACHING ASSISTANT  
Name: Kayce Lowe  
Office: AKH 113  
Office hours: Tue, Wed, and Thurs 9 am-12 pm  
Email: kayce.lowe@usm.edu

RECOMMENDED PRE-REQUISITE: FSC 320/320L  
CO-REQUISITE: FSC 440

COURSE DESCRIPTION AND OBJECTIVES  
In this 1 credit hour laboratory course, students will learn how various seized drugs will be qualitatively and quantitatively identified with analytical methods and different instruments. The course objective is for students to understand the scientific methodologies of drug analysis in a modern forensic laboratory. The experiments are designed to follow the FSC 440 lecture class so that students will be able to integrate theory with practice.

COURSE MATERIALS  
A. **Required lab notebook:** Carbonless Spiral Side 50-Set Lab Notebook. ISBN-13: 978-1429224550  
B. **Calculator:** Graphing calculators are permitted (but not necessary) for this class; however, some type of scientific calculator is required. Your calculator needs to be able to handle exponential and logarithmic functions. Cell phones may **NOT** be used as calculators during quizzes or exams.  
C. **Canvas support:** Lab instructions, syllabus, and assignments will be available on canvas as well as other relevant online resources.

IMPORTANT CLASS POLICIES  
Students are expected to be **punctual** for all laboratory meetings. Excessive tardiness may result in dismissal from lab. If you are more than 10 minutes late for the start of a lab, you may stay to obtain the knowledge of the laboratory but may receive a zero for the day. This is determined at the discretion of the instructor.  

**No laboratory meeting missed by a student may be made up without a valid excuse.**  
If you know of a laboratory meeting you will miss, arrangements with the laboratory instructor **must be made in advance** to take the lab with the other section. Labs must be conducted in partners or small groups, depending on the experiment. During an experiment please avoid distractions such as personal conversations or engaging in non-class activities. Sharing data to skip procedures will be considered
plagiarism and may result in re-doing the lab or a grade of zero for the day. Before leaving, every student is responsible for the neatness of his/her area, and cleanliness of the apparatus.

Safety: Safety is always a primary concern within any laboratory especially when conducting experiments. Goggles, gloves, close-toe shoes, and a lab coat will be required for every experiment.

Electronic Devices: Cell phones/ipads etc. must be turned off prior to the start of lab. No communication devices are allowed during tests.

COURSE REQUIREMENTS

Lab Preparation
The instruction of every experiment will be available at Canvas in advance. There will be pre-lab and review questions in each instruction. The pre-lab assignment must be completed in your lab notebook before you come to the laboratory. Your instructor or TA will check the pre-lab assignment at the beginning of each laboratory period.

Laboratory Procedures
After your lab report is collected by the lab instructor, a pre-lab lecture will be provided to illustrate the principles and how to carry out the experiment. At the end of the lecture, there may be a quiz about the current lab or previous experiment. The experiment will then be conducted in small groups. During any wait time, you can work on your raw data/calculations/review questions. Before leaving, you must get the TA’s initials to make sure your lab area is clean.

Notebook Format:
- Carbonless lab notebook is required.
- Notebook must be written in blue or black ink. No pencils.
- No white out or erasable ink is allowed. All correction in the notebook will be marked out with a single line, and initialed and dated.
- Notebook should be legible and coherent:
  - Every page should at least include: your name, course title, semester, section number, and page number.
  - First page should be the table of contents, which should include the following for EACH experiment: title, date, and page numbers of the experiment.
  - Starting from the second page, each lab entry must include the following: a title, purpose, partner’s name, equipment and materials, description of experiment (procedure), your observation, formulas used, data collected, diagrams (if applicable), calculation/discussion/conclusion and any other important information included in the experiment.
  - Each page should be numbered and initialed. You also need your TA’s initials before leaving.
- The notebook has the page set for every page number. Once you need to submit the lab assignments, you can simply tear off the white pages to turn them in and keep the yellow pages to yourself.
- All graphs and attachments must be either stapled or taped on a separate page in the notebook with a short description of the attachment.

COURSE WORKLOAD STATEMENT
Students are expected to invest considerable time outside of class in learning the material for this course. The expectation of The University of Southern Mississippi is that each week students should spend approximately 2-3 hours outside of class for every hour in class working on reading, assignments, studying, and other work for the course. We realize that most students work and have
family or other obligations. Time management is thus critical for student success. All students should assess their personal circumstances and talk with their advisors about the appropriate number of credit hours to take each term, keeping in mind that 30 credit hours each year are needed to graduate in four years. Resources for academic support can be found at https://www.usm.edu/success.

CLASS SCHEDULE

Important Dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>Aug 23</td>
<td>Last day to add/drop full-semester classes without instructor permission and receive 100% financial credit</td>
</tr>
<tr>
<td>Sep 29*</td>
<td>Mid-term Exam</td>
</tr>
<tr>
<td>Oct 27</td>
<td>Last day to withdraw from full term classes and receive a grade of W (after this date students will earn a letter grade)</td>
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<tr>
<td>Dec 1</td>
<td>Final Exam</td>
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* These dates are approximate and subject to change.

Laboratory Dates: (subject to change)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>August 25</td>
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<tr>
<td>September 1</td>
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<td>September 8</td>
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<td>September 15</td>
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<tr>
<td>September 22</td>
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<tr>
<td>September 29</td>
<td>Mid-term</td>
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<td>October 6</td>
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<td>October 13</td>
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<tr>
<td>October 20</td>
<td>Fall Break</td>
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<td>October 27</td>
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<td>November 3</td>
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<td>November 10</td>
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<td>November 17</td>
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<td>November 24</td>
<td>Thanksgiving</td>
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<tr>
<td>December 1</td>
<td>Final</td>
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GRADING POLICIES AND CALCULATION

A. **Exams and quizzes**: Two exams will be given over the course of the semester: one mid-term exam and one comprehensive final exam. If the prorated score of your final exam is higher than your mid-term exam, the lower one will be replaced by the prorated final exam grade. It is up to the lab instructor to determine when and how many quizzes will be given during the semester. **No makeup exams/ quizzes will be given.** If a student misses the mid-term exam or any quiz with an excuse, the excuse must be verified by the Office of Student Ombudsman Services (osos@usm.edu or alfreda.horton@usm.edu) and approved by the instructor. The missed exam/quiz then will be dropped. **Missing both exams without valid excuses will result in an F for the course.** Late students will not be admitted into an exam after 30 minutes have passed.
B. Weekly lab reports: At the start of each lab, you need to submit the weekly lab report for last lab. Any assignments turned in late without valid excuses will result in a **5-point drop** in grade for every day late. Specific rubrics are: pre-lab questions will be worth 8 points; experimental purpose/materials/procedures will be worth 6 points; raw data, calculation, conclusion/discussion, and review questions will be worth 16 points.

C. Lab performance: Students must follow the safety rules in the laboratory. Signing the lab safety agreement will be worth 10 points. Any infraction of these safety rules will result in a loss of 5 points, or dismissal from laboratory (resulting in a zero for that week’s lab grade). Each student is responsible for the neatness of assigned areas. This includes returning clean glassware to the drawers and keeping all unnecessary objects off the table tops. Any failure to keep your area/apparatus clean will result in a loss of 5 points. Before leaving the lab, you need to obtain your TA’s initials on your lab notebook to confirm the neatness in your area.

D. Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Midterm Exam</td>
<td>100</td>
</tr>
<tr>
<td>Final Exam</td>
<td>200</td>
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<tr>
<td>Weekly lab assignments</td>
<td>270</td>
</tr>
<tr>
<td>Quizzes</td>
<td>90</td>
</tr>
<tr>
<td>Lab performance</td>
<td>90</td>
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<tr>
<td>Total</td>
<td>750</td>
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The final grade can be calculated as the percentage by dividing your actual points by the total possible points. Grades will be assigned as outlined below. Students with less than 60% points will receive an F in the class.

- A 100% – 90%
- B 89% – 80%
- C 79% – 70%
- D 69% – 60%

*The instructor reserves the rights to modify the course topics, exam dates, and assign seats for exams. Appropriate curving of the grades, adding bonus points, or providing extra points opportunity would be possible if deemed necessary by the instructor.*

**ACADEMIC INTEGRITY STATEMENT**

All students at The University of Southern Mississippi are expected to demonstrate the highest levels of academic integrity in all that they do. Forms of academic dishonesty include (but are not limited to):

- Cheating (including copying from others’ work)
- Plagiarism (representing another person’s words or ideas as your own; failure to properly cite the source of your information, argument, or concepts)
- Falsification of documents
- Disclosure of test or other assignment content to another student
- Submission of the same paper or other assignment to more than one class without the explicit approval of all faculty members involved
- Unauthorized academic collaboration with others
- Conspiracy to engage in academic misconduct

Engaging in any of these behaviors or supporting others who do so will result in academic penalties and/or other sanctions. If a faculty member determines that a student has violated our Academic Integrity Policy, sanctions ranging from resubmission of work to course failure may occur, including
the possibility of receiving a grade of “XF” for the course, which will be on the student’s transcript with the notation “Failure due to academic misconduct.” For more details, please see the University’s Academic Integrity Policy: https://www.usm.edu/institutional-policies/policy-acaf-pro-012 Note that repeated acts of academic misconduct will lead to expulsion from the University.

ACADEMIC SUPPORT RESOURCES
Please see our Student Success Website: http://www.usm.edu/success for information on where you can find tutoring and other academic assistance, as well as the location of key resources on campus.

ADA POLICY
If a student has a disability that qualifies under the Americans with Disabilities Act (ADA) and requires accommodations, he/she should contact the Office for Disability Accommodations (ODA) for information on appropriate policies and procedures. Disabilities covered by ADA may include learning, psychiatric, physical disabilities, or chronic health disorders. Students can contact ODA if they are not certain whether a medical condition/disability qualifies.

Address:
The University of Southern Mississippi
Office for Disability Accommodations
118 College Drive # 8586
Hattiesburg, MS 39406-0001

Voice Telephone: 601.266.5024 or 228.214.3232 Fax: 601.266.6035
Individuals with hearing impairments can contact ODA using the Mississippi Relay Service at 1.800.582.2233 (TTY) or email ODA at oda@usm.edu.

MENTAL WELL-BEING STATEMENT
USM recognizes that students sometimes experience challenges that make learning difficult. If you find that life stressors such as anxiety, depression, relationship problems, difficulty concentrating, alcohol/drug problems, or other stressful experiences are interfering with your academic or personal success, consider contacting Student Counseling Services on campus at 601-266-4829. More information is also available at https://www.usm.edu/student-counseling-services. All students are eligible for free, confidential individual or group counseling services. In the event of emergency, please call 911 or contact the counselor on call at 601-606-HELP (4357).