

MARSHALL UNIVERSITY
FORENSIC SCIENCE PROGRAM
FSC 680 Seminar Spring Term

Instructor: Dr. Lauren R. Waugh

Day: Fridays

Time: 9 am to 11 am (unless stated otherwise)

Class Location: MUFSC Annex classroom & Others as listed

Office Hrs: MTR 10 AM to 12 PM

Office Location: MUFSC, WW 200EE

Email: richards18@marshall.edu

Office Phone: 304-691-8940

Required Textbook: None.

Course Goal: The goal of the Seminar Series is to provide students with an opportunity to enhance their presentation skills through presentation, observation and evaluation of others as well as themselves. During each semester, the student will accomplish progressive tasks.

Seminar is an opportunity to improve public speaking skills through observation, evaluation, and delivery using a variety of formats including presentation to lay audiences, e.g., civic groups, schools, law enforcement and legal professionals, as well as research presentations to professional audiences.

Fall Seminar Objectives: Upon successful completion of the course, students should be able to:

First Year Students:

Course Student Learning Outcomes	Practiced in this Course	Assessed in this Course
Provide a timely topic, abstract and current references as a seminar announcement and presentation.	Seminar Announcement Student Presentation Introductions	Seminar Announcement Seminar Presentation
Prepare a Power Point presentation for a lay talk for forensic topic based on current literature.	Lay Topic Presentation in Spring seminar during first year in program	PowerPoint Slides
Ask and respond to pertinent questions during a question-and-answer period.	Lay Topic Presentation in Spring seminar during first year in program Guest presenters	Oral Presentation
Demonstration effective evaluation skills by providing objective criticism through written evaluation	Evaluate first year students' oral presentation utilizing a rubric	Completed rubrics for each student presentation Completed self-evaluation

Second Year Students:

Course Student Learning Outcomes	Practiced in this Course	Assessed in this Course
Ask and respond to pertinent questions during a question-and-answer period.	Lay Topic Presentation in Spring seminar during first year in program Guest presenters	Oral Presentation
Revise a resume and cover letter	Revision of resume created in Fall seminar during first year in program Meet with Career Services Receive feedback from Career Services	Resume/CV Mock Interviews
Demonstration effective evaluation skills by providing objective criticism through written evaluation	Evaluate first year students' oral presentation utilizing a rubric	Completed rubrics for each student presentation

ATTENDANCE: Attendance is mandatory, either in-person or online. Students are expected to attend **ALL** seminars including special seminars that may be scheduled at alternative times throughout the semester. A written explanation is required for all absences or late arrivals.

Application for a Forensic Science Absence Form is included in this syllabus but may also be found at www.marshall.edu/forensics in the Current Students section of the website. This form must be received by the course instructor to receive an excused absence. Excused absences will be given for medical emergencies or other circumstances of a serious and documented nature. Students may also receive an excused absence for approved professional forensic science travel. An Excused Absence results in no point deductions whereas Unapproved Absences or late arrivals will result in a **5 point deduction based on 100 total points** for the course. The Form mentioned above should be submitted prior to, the day-of, or the first day back to class following an absence. When absences occur, whether excused or unexcused, the **student has 7 days** to review the taped presentation and to submit an evaluation. Failure to do so within 7 days will result in point deductions.

Student Absence Form: www.marshall.edu/forensics <Student> <secure section> <Forms>
Completion of an Instructor-signed Student Absence Form is facilitated by the Student and sent on to Dr. Waugh for all absences. This may occur BEFORE the absence (recommended) or on the first day of class upon return. Whether the absence is EXCUSED or UNEXCUSED will dictate whether the student will be granted make-ups and whether they will receive point or grade reductions. Completed Absence Forms will be placed in the student's formal file. A Completed Absence Form is one bearing signatures of the student, instructor(s), and program director. If the student is not able to attend class for any reason, a phone call or e-mail to the Instructor is required BEFORE class time as this is a standard employer practice.

Excused Absences: Dr. Waugh must be notified of absences. Formal documentation is required for Excused Absences which may involve physician statements excusing the student from class, obituaries, or professional travel documentation. With an Excused Absence, the student may be asked to take an exam BEFORE the scheduled date. No exams, labs, or other formal exercises will be made up without an Excused Absence. Examples of Excused Absences include

- Personal Medical Emergency – Formal documentation is required from a licensed physician or appropriate healthcare provider
- Death in the Immediate Family – Documentation required
- Forensic Professional Travel – Documentation required. Marshall University Forensic Science Program, Marshall University, the West Virginia Policy Board for Higher Education are not liable for accidents or injuries incurred during trips within or out of the state.

Unexcused Absences: Any unexcused absence in which a student misses a lab or exam or other graded activity will result in the deduction of 5 points from the student's final grade for **EACH** presentation missed. If two presentations are schedule consecutively on a single day are missed, then there will be a grade reduction of 10 points.

Date	Activity	Notes
17-Jan	9 AM – 2nd years check-in	Dr. Lauren Waugh
	10 AM - 1st years Internship basics	
24-Jan	9 AM - Mock Interview Workshop	West Wing
	Otesha McGhee- Career Services	West Wing
31-Jan	Mock interviews	Exact timing TBD
	2nd years	Interviewing
	1st years	Observing
7-Feb	Mock interviews	Exact timing TBD
	2nd years	Interviewing
	1st years	Observing
14-Feb	NO CLASS	
	February Break	
21-Feb	AAFS in Baltimore	No class meeting
28-Feb	Jenny Sulcebarger	Tnetative topic: Effect of law changes to the drug laboratory
	Ohio BCI	
7-Mar	Erin Crum	Deadline for lay topic approval by full time faculty member
	Eastern Kentucky University	
14-Mar	TBD	
21-Mar	Spring Break	No class meeting
28-Mar	To be determined	Slides due for April 11 presenters
3-Apr	Marshall University Research and Creativity Symposium	Memorial Student Center
4-Apr	TBD	Slides due for April 18 presenters
11-Apr	Class of 2026 Lay presentations	3 Students presenting
18-Apr	9 AM Class of 2026 Lay presentations	2 Students presenting
	10 AM - 2nd year Exit Interview	
25-Apr	College of Science Research Expo	Science Building
2-May	TBD	
9-May	Forensic Science Open House	Time TBD
10-May	Commencement 9 AM	Marshall Health Arena
TBD	College of Science Hooding Ceremony	Location TBD

GRADING:

- A = All objectives are satisfactorily met
- B = Majority, not all, objectives are satisfactorily met
- C = Average number of objectives are satisfactorily met
- D = Less than half of objectives are satisfactorily met
- F = Substandard performance on most objectives

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

Points will be deducted for missed or late assignments. Point values for each assignment and due dates are listed below.

1ST Year Students

DUE DATE	ASSIGNMENT	POINTS
March 7	Lay Topic Approved	-5 pts
Friday, 2 weeks before presentation	Rough slides to professor for review (March 28 or April 4)	-5 pts
Friday, 1 week before presentation	Announcement Due (April 4 or April 11)	-5pts
2 days before presentation	Final slides (April 9 or April 16)	-5 pts
Day of presentation	Presentation Grade	-20 pts
Day of presentation	Presentation Time	-10 pts
1 week after presentation	Self-evaluation	-5 pts
Every class or event	Attendance	-5 pts per presentation
Every class	Evaluations	-5 pts

2nd Year Students

DUE DATE	ASSIGNMENT	POINTS
January 31	Research Poster - approved	-10 pts
March 3	Final Draft of Paper Due – FAILURE TO SUBMIT WILL RESULT IN COURSE FAILURE	
Every class	Attendance	-5 pts per presentation
Every class	Evaluations	-5 pts

UNIVERSITY POLICIES

For all policies go to <http://www.marshall.edu/academic-affairs/policies/>.

Academic Dishonesty Academic dishonesty will not be tolerated. Policy AA-12 defines academic dishonesty and describes the sanctions associated with it.

Affirmative Action This course will follow Marshall University's policy on Affirmative Action. Specifically, all students will be afforded equal opportunity without regard to race, color, sex, religion, age, disability, national origin, or sexual orientation.

Inclement Weather Policy on weather-related and/or emergency closings and delays. As this is an afternoon class, we will not be affected by delays. To find out if the University is closed, please call Audix at 696-6245.

Students with Disabilities Policy Students with disabilities are required to prepare a notice from either the Help Center, Myers Hall, or Sandra Clements, PH 117, before a special accommodation can be honored. The link describing this policy is <http://www.marshall.edu/disabled>.

University Computing Services Acceptable Use Policy MUBOG Policy IT-1 explains this policy and students are responsible for knowing the University Computing Services' Acceptable Use Policy available at <http://www.marshall.edu/ucs/CS/acptuse.as>

INSTRUCTIONS FOR PRESENTERS

1. First-year students will present an effective seminar presentation as assigned.
2. Presenters must consent to being recorded and that the recording will be posted on the program's website.
3. Presenters must consent to being evaluated by their audience. Any single item on the rubric which averages below 3 must be rectified.
4. Presenters agree to evaluate their recorded presentations, resulting in submission of their Self-Evaluation within 7 days of their formal presentation.
5. First-year and second-year students agree to evaluate all presenters as defined.

SPECIAL INSTRUCTIONS:

Three reviews are required for all research proposals, research papers, research seminar slides and posters. These reviewers are listed along with their signatures on your Research Proposal completed in May. Reviewer changes may be made with a written request and approval. Logos used on posters and/or slide presentations require formal agency approval. At least one reviewer must be external to the MU Forensic Science Program.

Seminar Announcement Required Materials: Title, Abstract, Reference, Bio

Reviewers must approval student presenters' title, abstract, references, & bio. Use of the recommended format is required for submission. **Abstracts should be no less than 250 words and no greater than 400 words.** See the example below. Note: A minimum of **3 peer-reviewed journal articles** published within the past 5 years from the scientific literature are required. Internet references, commercial protocols, and laboratory protocols may be listed but do not count as peer-reviewed references.

Once Reviewers approve the Title, Abstract & References, the announcement is sent to Dr. Waugh and Connie to create a formal announcement for attendee notification. Announcements go out at least 2 weeks prior to the start of presentation(s). Final materials are submitted to the Program Office with electronic approval of all reviewers.

Presentation Practice: By appointment, students are encouraged to practice their presentations.

Non-Presenting Student Evaluations: In the Fall Term, 1st year students observe and evaluate 2nd year research presentations using the standard evaluation form. These, and all other evaluations, are compiled for feedback to the presenter. Comments should be professional and appropriate for investigator review.

Self-Evaluations: Each presenter is responsible for performing and submitting a self-evaluation within 7 days following their presentation.

Student Presentations: Minimum of 20-minutes plus Q&A. The grace period will be **17 to 23 minutes**. Presentation outside of this time range will result in a letter grade reduction of the student's overall seminar grade. A student may re-present (record) their presentation to be within the 17 to 23 minutes time frame in order to restore their grade.

Student Presentations will be virtual through Microsoft Teams. Students may present from their residence or a location in the Forensic Science Center (unless campus is closed). Locations at the Forensic Science Center include WW classroom, Annex classroom, or Annex conference room. If a student chooses to present from home, it is the student's responsibility to ensure high-quality and reliable internet connectivity. Points may be deducted if quality and reliability are lacking (unless campus is closed).

Second-Year Student Selection of Poster Presentation Venue: Students must submit a well-developed poster by the end of Fall Semester along with their choice of poster presentation venues. All students are required to present their research posters at the MUFSC Research Day event each year. Other poster venues may include: AAFS, YFSF BYOP, IAI, CB-IAI, MAAFS, SOFT, etc. Other oral venues: AAFS, YFSF, BYOS

Main Elements of a Good Seminar:

- Organization
- Timing
- Presentation style
- Level

Organization:

- Beginning, middle and end; incorporate the art of story telling
- Statement of purpose; why it's important; draw your audience in
- Statement of hypothesis, if appropriate
- Present methods in simple terms; avoid jargon
- Provide conclusions and summary
- Provide acknowledgements
- Stay within time constraints
- Be sure to know how to use the equipment before presenting

- Aids should enhance your presentation not be your presentation
- Load presentation in advance; prior to presentation
- Practice, practice, practice

Slides:

- Avoid red; use good color combinations, e.g. dark background and bright lettering
- Use font size no smaller than 28;
- Keep it simple; not too busy
- Experiment with backgrounds and lettering
- Use progressive disclosure to emphasize main points
- Use simple tables and graphs; make sure they are viewable
- Be creative but don't get fancy without purpose

Quality:

- National meeting quality

Timing:

- Not too long or too short
- Allow for pauses especially at slide transition
- Plan on 1 minute/slide
- Practice what to say for each slide or major point
- Allow time for questions and answers
- Answer quickly, yet concisely; if you don't know, state it or recommend where the information might be obtained

Presentation Style:

- Know your audience and target your audience's knowledge-base
- Is your talk interesting to your audience? Can you hold their attention?
- Maintain good eye contact
- Pay attention to body language
- Avoid distracters, e.g. moving arms/hand around aimlessly, pacing or shifting aimlessly, avoid 'ums' or other ineffective verbal connectors
- Effectively pause; breathe
- Come out at some point and interact with your audience
- Use examples and analogies to personalize your talk
- Use pictures to explain complex concepts
- Avoid unnecessary detail but do not oversimplify

Appearance:

- Neat and professional as if presenting at a national meeting

Presentation Evaluation

Students are required to evaluate each presentation which requires that the evaluator become familiar with the evaluation form itself. Once all evaluations are compiled, the student presenter will receive a summary of all quantitative results from the rubric itself as well as any qualitative information such as comments. It is essential that each person evaluate another in a professional manner providing useful feedback and other constructive criticism intended to facilitate the presenter's communication and presentation skills. Any unprofessional comments will require a written explanation from the reviewer.

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Student Lay Talk Presentations must be at least 20 minutes in length but should not exceed 23 minutes. Presentation time does not include questions at the end. If a presentation is less than 17 minutes or longer than 23 minutes (not including questions), the student's seminar grade will be reduced one letter grade. However, there is a remedy. To redeem their grade, a student may re-present and record their presentation via Teams or Ensemble for review and regrade. If the second presentation falls in the 17 – 23-minute time frame, the student's grade will not be reduced.

Example of how to submit announcements: FOR FORMAL SEMINAR AND POSTER PRESENTERS - USE THIS TEMPLATE. DO NOT CHANGE FONT.

MONDAY, April 17, 2016, 9:30-10:00 A.M.

Presenter: Alexandria Bondra

Introduction by: Sally Edwards

Topic Advisor: LIST MU TOPIC ADVISOR HERE

Biography:

Alexandria Bondra is from Charlotte, North Carolina. She attended North Carolina State University in Raleigh, where she graduated with a Bachelor of Science in Chemistry and a minor in Criminology. She is currently working towards her Master's degree in Forensic Science at Marshall University with emphases in Forensic Chemistry, Crime Scene Investigation, and Computer Forensics. This summer she has been selected for an internship at the Marshall University Forensic Science Center in Forensic Chemistry/Drug Analysis.

Fentanyl: Use, Misuse, and Analysis Methods

Fentanyl is a powerful synthetic opiate analgesic similar in effect to morphine, but approximately 100 times more potent. It is typically used to treat cancer patients with chronic pain, who are physically tolerant to opiates, or to manage severe pain after surgery. Fentanyl is a schedule II prescription drug, while a number of fentanyl analogues exist as Schedule I drugs because of their lack of acceptable medical use and pattern of abuse. Fentanyl depresses the central nervous system and respiratory functions making it beneficial in pain relief, but extremely dangerous without medical supervision. Fentanyls are most commonly used by intravenous administration, but they may also be smoked or snorted. Illicit use of fentanyls first appeared in the mid-1970s in the medical community and continues in the present. Fentanyl and its analogues can be produced clandestinely, with some knowledge of organic synthesis, allowing it to be readily synthesized. Fentanyl is identified using a solid-phase extraction basic drug screen in blood and/or urine followed by full scan gas chromatography-mass spectrometry (GC-MS) in the electron impact ionization mode. Fentanyl can also be detected in hair specimens using GC-MS/MS.

References:

1. James J. Kuhlman Jr, Rebecca McCaulley Tara Valouch, and George Behonick. Fentanyl Use, Misuse, and Abuse: A Summary of 23 Postmordem Cases. *Journal of Analytical Toxicology*. **27(7)**: 499-504 (2003).
2. C. Moore, L. Marinetti, C. Coulter, and K. Crompton. Analysis of pain management drugs, specifically fentanyl, in hair: Application to forensic specimens. *Forensic Science International*. **176(1)**: 47-50 (2008).
3. Theodore C. Kram, Donald A. Cooper, and Andrew C. Allen. Behind the Identification of China White. *Analytical Chemistry*. **53(12)**, 1379A-1386A (1981).
4. U.S. Department of Justice. Fentanyl: Situation Report SR-000001. *National Drug Intelligence Center*. (June 5, 2006).
5. Jorg Teske, Jens-Peter Weller, Klaus Larch, Hands Dieter Troger, and Matthew Karst. Fatal outcome in a child after ingestion of a transdermal fentanyl patch. *Int J Legal Med*. **121**:147-151 (2007).
6. D. Garside, B.A. Goldberger, and H. Sachs. Forensic Application of Hair Analysis. *Drug Testing in Hair*. 158, 193, & 217. (1996).

FSC 680 Course / Instructor Evaluation

The purpose of the course/instructor evaluation is to improve the course and instructor in a way that benefits the majority of students now and into the future. As instructors we listen, evaluate, and often incorporate your suggestions. However, in every instance it is the responsibility of the instructor to make changes and improvements to his or her course in a way that best serves the program, its accrediting agencies, and the majority of its students. If you are advocating change, you should be very specific in your evaluation comments or in your letter of complaint. Students-complaining-to-students may be ineffective in affecting change. Students-complaining-to-staff may be ineffective in affecting change. Only when information is communicated to your instructor and/or advisor, can informed attempts be made to meet the needs of students, faculty, staff, as well as program reviewers.

All student inquiries and complaints are to be posed in a professional manner.

To positively affect change, please observe the following procedure:

1. Discuss the "issue" with the instructor.
2. Respond constructively on the Course/Instructor Evaluation if the problem or issue is not resolved to your satisfaction.
3. If seeking a formal response, file a written statement with the Program Office. If you are not satisfied with the Program's action, a Program Hearing composed of the FS Graduate Studies Committee will be conducted at your request to hear the complaint and to provide a formal ruling or action.
4. All written complaints will remain on file for a minimum of 5 years for FEPAC accreditation review.

Poster Development, Evaluation, & Review

By the end of the term, 2nd year students are required to submit a well-developed research poster reviewed by the student's MU Topic Advisor at a minimum. To receive approval of the poster, the student must have approval from all 3 research reviewers as stated on their original "Research Proposal" form. As each student will evaluate student posters, it is important to become familiar with the poster rubric for the purposes of a) using it as a guide document when designing and creating a poster, and b) when serving as a evaluator of a poster. The Poster Rubric is provided.

Poster Instructions & Information

ALL POSTERS MUST BE REVIEWED BY THREE (3) APPROVED REVIEWERS. THIS MUST BE IN WRITING. DR. WAUGH WILL SUBMIT THE POSTER VIA EMAIL TO CONNIE MYERS ONCE WRITTEN APPROVAL IS RECEIVED FROM ALL THREE (3) REVIEWERS.

Poster Assistance Links:

http://www.kumc.edu/SAH/OTEd/jradel/Poster_Presentations/PstrStart.html

<http://www.ncsu.edu/project/posters/>

<http://www.swarthmore.edu/NatSci/cpurrin1/posteradvice.htm>

Posters should be created in Power Point. The maximum poster size is 52" x 52" but 52 X 48 is also fine. The MU Topic Advisor is responsible for final review and proofing their designated posters. Poster quality is the responsibility of each student. Failure to obtain all reviews (3 committee member reviewers) that result in the REPRINTING of a poster is the student's responsibility.

Essential Elements of a Portfolio

We recommend that you maintain a record of all educational activities while enrolled in the program and thereafter. Suggested materials are as follows:

- Resume
- GA, TA, RA or WS positions by date and descriptions of duties; supervisors with contact information
- Seminar slide and poster presentations by date and venue
- Meeting attendance by date and any educational sessions attended
- Workshops by content, presenter, and date
- Special award or honors
- Presentation evaluations
- Transcripts
- Independent Study reports
- Background check reports, if available
- Information needed for completing background checks
- Internship information by date, agency and supervisor
- Internship evaluations and research paper or hard-copy Internship Notebook itself
- Plan of Study
- Any other information needed for rapid response to job postings
- Employment/ internship contacts

Career Development Assistance

www.marshall.edu/forensics Under the 'Current Students' tab – enter password

1. Forensics Career Guide for Internships
2. Forensics Career Guide for Job Seekers
3. CV Template; Standard CV Example; Long CV Example
4. Interview Stream Instructions
5. Interview Stream Link
6. Career Services Website