Course Description

Fundamental theories of physical evidence practically applied and the legal considerations involved in its recognition, collection preservation and presentation in court are covered. Topics include securing and recording the crime scene, collecting evidence, maintaining the chain of custody and reconstruction.

This course is intended to provide students with a foundation in crime scene investigation. It is aimed at demystifying the role of crime scene investigators (CSI) and the tasks they perform, while focusing on the laws of search and seizure as they apply to, and shape, the processes involved in conducting crime scene investigations. Students will learn about the history of crime scene investigation to gain perspective and appreciation for its current practices, as well as the intricacies and limitations of this forensic science subdiscipline. They will be trained using best-practices to recognize, process and collect evidence, maintain a chain of custody, and write written reports. Opportunities to work individually and collectively in small groups will require that students strategically plan a course of action for processing various mock crime scenes and evidence within. To be successful in this course, the principles of forensic investigations, as well as critical thinking skills, must be applied to crime scene processing and evidence collection.
Disclaimer: This class is intended for mature students and may cover graphic content, such as criminal cases, discussions, and/or topics. Most of the material presented will NOT be censored. Under NO CIRCUMSTANCES are students permitted to take photos, make copies or recording of the lecture slides, photos, or video recordings. Failure to comply with these guidelines may result in academic penalty.

Outlines will be provided or made accessible via Canvas for each lecture pertaining to the topic that will be discussed.

Note: FS 161 is required for the fulfillment of the FS biology major, as well as the FS minor. It is recommended for JS majors. However, it is open to any student with a general interest in the subject.

Mode of Instruction

This course will be taught in-person. In other words, all lecture material and practicals will be covered in a designated classroom, during the course’s scheduled meeting time (see SJSU Instruction Modes).

NOTE: In the event that there is a federal/state mandate for the CSU to return to sheltering-in-place, this course will switch to synchronous online mode using the video conference application, Zoom. Practical sessions will continue to take place remotely.

- Online Zoom Course Room – Virtual classroom available from 8:30a-11:30a
- NOTE: Due to the nature of this in-person lab and the ongoing pandemic, students are required to purchase a personal Tyvek suit (a protective, hooded coverall; one that covers the entire body and head and is usually equipped with a zipper) ($6.50). Safety goggles ($3.50) and face shields ($3 - optional) will also be available for purchase. Nitrile (latex-free) gloves and shoe coverings will be provided.

Technology Requirements

(In the event that there is a call to a revert to online synchronous modality)

- Students are required to have an electronic device (laptop, desktop or tablet) with a camera and built-in microphone. SJSU has a free equipment loan program available for students.
- Students are responsible for ensuring that they have access to reliable Wi-Fi during class. If students are unable to have reliable Wi-Fi, they must inform the instructor, as soon as possible to determine an alternative. See the SJSU Learn Anywhere website for current Wi-Fi options on campus.)
Zoom or Other Teleconferencing Platforms Protocol

Use of Camera Remotely

Students are encouraged to turn their cameras on during group activities/discussion (not a requirement) to foster a sense of community, increase focus, remain engaged and maintain accountability. To test your video click on this Zoom Help Center link, Testing Your Video. An option to “Choose a Virtual Background” exists if you wish to display an image or video as your background (for privacy or personal flare). You may also choose to customize your Zoom Profile by adding a personal picture or an Avatar (i.e. Mirror: Cartoon Avatars & Stickers for Zoom, Loomie, Loomie 3D Avatars, etc.) to your Zoom profile as a fun, creative and memorable way to display your person or interests. See Zoom Classroom Etiquette below for more details.

Zoom Classroom Etiquette

- **Mute Your Microphone**: To help keep background noise to a minimum, make sure you mute your microphone when you are not speaking.
- **Be Mindful of Background Noise and Distractions**: Find a quiet place to “attend” class, to the greatest extent possible.
  - Avoid video setups where people may be walking behind you, people talking/making noise, etc.
  - Avoid activities that could create additional noise, such as shuffling papers, listening to music in the background, etc.
- **Position Your Camera Properly (if using)**: Be sure your webcam is in a stable position and focused at eye level.
- **Limit Your Distractions/Avoid Multitasking**: You can make it easier to focus on the meeting by turning off notifications, closing or minimizing running apps, and putting your smartphone away (unless you are using it to access Zoom).
- **Use Appropriate Virtual Backgrounds**: If using a virtual background, it should be appropriate and professional and should NOT suggest or include content that is objectively offensive or demeaning.

Recording of Zoom Classes/Group Meet-Up Sessions

This course or portions of this course (i.e., lectures, discussions, and student presentations) may be recorded for instructional or educational purposes. The recordings will only be shared with students enrolled in the class through Canvas. The recordings will be deleted at the end of the semester. If, however, you would prefer to remain anonymous during these recordings, then please speak with the instructor about possible accommodations (e.g., temporarily turning off identifying information from the Zoom session, including student name and picture, prior to recording).

Students are not allowed to record without instructor permission.

Students are prohibited from recording class activities (including class lectures, office hours, advising sessions, group collaborations, etc.), distributing class recordings, or posting class recordings. Materials created by the instructor for the course (syllabi, lectures and lecture notes,
presentations, etc.) are copyrighted by the instructor. This university policy (S12-7) is in place to protect the privacy of students in the course, as well as to maintain academic integrity through reducing the instances of cheating. Students who record, distribute, or post these materials will be referred to the Student Conduct and Ethical Development office. Unauthorized recording may violate university and state law. It is the responsibility of students that require special accommodations or assistive technology due to a disability to notify the instructor.

Course Goals and Student Learning Objectives (LO)

Upon successful completion of this course, students will be able to:

- **LO1** Document crime scenes using reports, photography, and diagrams, and demonstrate this knowledge in practical exercises.
- **LO2** Demonstrate practical knowledge in processing specific types of evidence including fingerprints, blood spatter, firearms, glass, impression, and trace evidence.
- **LO3** Demonstrate understanding of crime scene hazards and corresponding safety measures, search warrants and the 4th Amendment, chain of custody, court testimony, the Locard Exchange Principle, and other critical terms and concepts.
- **LO4** Recognize, collect, handle, package and preserve physical evidence using safe and appropriate methods, and demonstrate and articulate this knowledge.
- **LO5** Reconstruct crime scenes using the scientific method and evidence-based logic.

Required Texts/Readings


- [http://www.forensicsciencesimplified.org/](http://www.forensicsciencesimplified.org/)
- Additional required readings, tutorials, videos, and links will be posted on Canvas.
  - NOTE: It is your responsibility to come to class prepared. Therefore, frequently check for new material posted, and download and/or print documents uploaded to Canvas.
Assignments

1. **Crime Scene Labs/Exercises (40%)**: Practical lab exercises in searching, scene diagrams, photography, report writing, developing and lifting latent fingerprints, blood spatter interpretation, and impression evidence. (LO1)

2. **Exams (40%)**: There will be two in-term exams, one final, and pop-quizzes on course material throughout the semester. Format may include the following: multiple choice questions, fill-in-the-blanks, true/false, short answers, short essays, and diagrams. (LO2)

3. **Chapter Review/Discussion Questions (20%)**: Chapter review questions can be found at the end of each chapter. Upload your responses to Canvas by the due date. Worksheets on videos, or other topics may also be distributed. (LO2-4)

Grading Scale for All Assignments

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<th>Letter Grade</th>
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<tr>
<td>A plus (A+)</td>
<td>97-100</td>
<td>C plus (C+)</td>
<td>77-79.9</td>
<td>F</td>
<td>&lt;60</td>
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<td>A</td>
<td>94-96.9</td>
<td>C</td>
<td>74-76.9</td>
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<tr>
<td>A minus (A-)</td>
<td>90-93.9</td>
<td>C minus (C-)</td>
<td>70-73.9</td>
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<td>B plus (B+)</td>
<td>87-89.9</td>
<td>D plus (D+)</td>
<td>67-69.9</td>
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<td>B</td>
<td>84-86.9</td>
<td>D</td>
<td>64-66.9</td>
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<td>B minus (B-)</td>
<td>80-83.9</td>
<td>D minus (D-)</td>
<td>60-63.9</td>
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All assignments are graded based on adherence to directions, thoroughness, thoughtfulness, clarity, and logic.

Note: A grade of C or better is required for all Justice Studies major and minor coursework, and desirable for students enrolled in the Forensic Science majors and/or minor.

Extra Credit

Extra credit opportunities may be available throughout the semester and will be used to augment your final grade up to 3%. You may submit up to three extra credit assignments of your choosing. Each extra credit opportunity is given a weighted value of 10 marks (Submit under Extra Credit #).

1. **Join a professional organization** (CAC, AAFS, IAI, etc.) that is of specific interest to you and supply proof of membership before the end of the semester. A professional organization is one that holds conferences and/or produces a periodic journal. This is not the same thing as an internship, job, or student organization; it is a professional membership.

2. **Tour a crime lab** and write a 2-page, typed, double-spaced synopsis of the experience. Santa Clara has monthly tours, and San Mateo has an annual tour in October.
3. **Portfolio**: Students may turn in a neat and organized 3-ring binder (portfolio) at the end of the semester containing all work completed in the class. Copies of group assignments are acceptable. This should be professional quality (for example, you would bring it to an interview to display your work).

4. **Read and critique a current journal article** from the forensic science discipline. Discuss its relevance to forensic science and how it contributes to the advancement the field.

5. **Upload proof of a submitted grant/scholarship application** and all the required paperwork (see the Justice Studies webpage for a list of scholarships). The grant or scholarship application may be for an external source. However, proof of submission must be uploaded along with the application package submitted.

6. **Redo and resubmit any three assignments OR lab reports**. However, changes MUST be reflected on the graded assignment containing the instructor’s feedback using clearly colored text or highlighter to illustrate where corrections have been made. Failure to do so will warrant no change to the original grade assigned. (*Submit appropriately under Extra Credit or Assignment Re-do #).

Class Protocol and Policies

- All assignments are to be completed **a week after** being assigned or completion of a practical. **Late work MAY NOT** be submitted. Assignments submitted thereafter will **NOT** be accepted and results in an **automatic fail unless extraordinary, documented circumstances** exist or a **doctor’s note** is presented. AVOID MISSING PRACTICALS! Make-up sessions may not be available. Should you know in advance of any extenuating circumstances that conflict with such sessions, it is your responsibility to inform your lecturer. The possibility for submitting an alternative assignment may be granted at discretion, but be advised that such undertaking will be quite demanding. If there is any doubt about the requirements for an assignment, or due dates/times, re-read the directions of the assignment and/or schedule. If your question(s) remains unanswered, contact your instructor for clarification.

- Attendance and class participation is expected. It is essential that you come to class prepared. Therefore, it is your responsibility to stay on top of your readings, complete assignments on time, and participate in class discussions. Lack of adequate participation **will** result in pop quizzes, which **will** count toward your final grade.

- The use of cell phones is NOT PERMITTED during class unless they are used to partake in this course virtually. Students caught using their phone will be asked to surrender it for the remainder of the lecture or excused from the class. If there is an emergency, students are asked to quietly step outside of the classroom or discretely turn off the device’s camera and microphone and proceed with the call. Laptops are permitted for note-taking only.
Student Resources

Forensic Science Student Group (FSS)

Forensic Science Students is a campus group open to all students interested in forensic science. The group meets biweekly during the semester and offers friendship, forensic science-related activities, networking opportunities, and mentorship. Members of the FSS participate and assist at conferences, CSI camps, guest speaking events, and other extra-curricular activities. FSS Peer Mentors assist forensic science students in navigating the major, understanding requirements and prerequisites, and making wise choices in their college careers. Mentors may also offer limited tutoring, and facilitate educational and professional opportunities. Contact sjsu.fss@gmail.com for more information, or to get an application for membership.

Student Technology Resources

Computer labs for student use are available in the Academic Success Center located on the 1st floor of Clark Hall and on the 2nd floor of the Student Union. Additional computer labs may be available in your department/college. Computers are also available in the Martin Luther King Library (see Student Computing Services and equipment available on hand). A wide variety of audio-visual equipment is available for student checkout from Media Services located in IRC 112. These items include digital and VHS camcorders, VHS and Beta video players, 16 mm, slide, overhead, DVD, CD, and audiotape players, sound systems, wireless microphones, projection screens and monitors (see Information Technology’s Equipment Loaning page).

Peer Connections

The Peer Connections main office is located in Room 600 in the Student Services Center. It provides assistance to students in the development of their full academic potential and motivates them to become self-directed learners. The center provides support services, such as skill assessment, individual or group tutorials, subject advising, learning assistance, summer academic preparation and basic skills development. https://www.sjsu.edu/peerconnections/index.php

ACCESS (Academic Counseling Center for Excellence in the Social Sciences)

The Academic Counseling Center for Excellence in the Social Sciences (ACCESS) provides advising for undergraduate students majoring or wanting to major in programs offered in CoSS Departments. The center provides support services, such as advising for freshman, general education, and probation; planning for academic success and graduation; tutoring; and career counseling. The main office is located in Clark Hall, room CH 240. Typically, all CoSS students and students who would like to be in CoSS are invited to stop by the Center for general education advising, help with changing majors, academic policy related questions, meeting with peer advisors, and/or attending various regularly scheduled presentations and workshops. However, due to COVID-19 restrictions, office hours are limited to virtual meetings (Monday to
SJSU Writing Center

The SJSU Writing Center located in Room 126 in Clark Hall offers a variety of resources to help students become better writers, including one-on-one tutoring sessions and numerous writing workshops. All services are free for SJSU students. [http://www.sjsu.edu/writingcenter/](http://www.sjsu.edu/writingcenter/)

University Policies

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs’ [Syllabus Information](https://www.sjsu.edu/graduate/grad-programs/syllabus-information) webpage.

Important Dates This Semester

**University Calendar:**

Jan 26-Feb 14: Late Registration for Spring 2022. Registration via MySJSU starting after 7am
Feb 7: Last Day to Drop Without a “W” grade
Feb 14: Last Day to Add a Course, Submit Audit, Last Day to Request CR/NC
Apr 22: Last Day to Submit Late Drop/Withdrawal Request (see Registrar Forms)
May 16: Last day of Instruction
May 18-25: Final Exams (see Exam Schedule)
*Late add fees apply. See above website.

Justice Studies Reading and Writing Philosophy

The Department of Justice Studies is committed to scholarly excellence. Therefore, the Department promotes academic, critical, and creative engagement with language (i.e., reading and writing) throughout its curriculum. A sustained and intensive exploration of language prepares students to think critically and to act meaningfully in interrelated areas of their lives—personal, professional, economic, social, political, ethical, and cultural. Graduates of the Department of Justice Studies leave San José State University prepared to enter a range of careers and for advanced study in a variety of fields; they are prepared to more effectively identify and ameliorate injustice in their personal, professional and civic lives. Indeed, the impact of literacy is evident not only within the span of a specific course, semester, or academic program but also over the span of a lifetime.

Course Instructor

Dr. Shawna Bolton first attended the University of Toronto where she obtained her BA in Anthropology (major) and double minored in French and English. She then went on to complete an MSc in Criminal Justice with an advanced forensic anthropology interdiscipline at Radford
University before earning her PhD in Forensic Sciences at the University of Wolverhampton in the UK. There, Dr. Bolton conducted preliminary research investigating the post mortem molecular properties of cartilage and its potential use as a forensic tool. Upon the completion of her doctorate, she has worked in partnership with Global Forensics and the University of Wolverhampton to prepare and provide academic and laboratory training to Rwandan National Police officers enrolled in an intensive forensic DNA and toxicology module. To date, she is teaching FS courses while providing students with fieldwork and laboratory internship experience through her on-going research involving cartilage degradation.

### Tentative Course Schedule

**Important Dates** - The schedule is subject to change at the lecturer’s discretion. If ahead of schedule, further lectures may include topics such as underwater investigations, arson and explosives, and forensic nursing.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th><em>Discussion Topic(s)</em></th>
<th><strong>Reading &amp; Assignments</strong></th>
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</table>
| 1    | 01/26| Lecture 1: Course Overview, Introduction to CSI and CSI as a Career  
Lecture 2: The CSI and FBI Effects | CSI Episode (Mini Response Paper) |
| 2    | 01/31 & 02/02 | Lecture 2: The CSI and FBI Effects (Cont’d)  
Lecture 3: Forensic Investigators and the Scientific Approach |  |
| 3    | 02/07 & 02/09 | Lecture 3: Forensic Investigators & the Scientific Approach (Cont’d) (Pre-recorded)  
Lecture 4: CSI Ethics, Physical Evidence and Investigations | Sherlock Holmes (Mini Response Paper)  
Chapter 1 Lecture 3 Qs |
| 4    | 02/14 & 02/16 | Lecture 5: Evidence and the Laws of Search and Seizure  
Lecture 6: Crime Scene Personnel, Important Scene Considerations, and PPE | Lecture Qs  
Chapter 2 Labs D & E |
| 5    | 02/21 & 02/23 | Lecture 7: Scene Investigations and Documentation Process ( Videography, Notes/Reports, Photography, and Diagrams/Sketches) | Chapters 3-5, Lab K  
In-Person Group Labs (CSI Suite)  
Scene Description, Videography, Photography, Scene Sketch |
| 6    | 02/28 & 03/02 | Lecture 8: Detecting Evidence: Trace Evidence, Visual Enhancement Methods & Evidence Collection  
Midterm 1  
Lecture 8 (Cont’d - Pre-recorded) | Chapters 6, 8  
Lectures 1-6 Sketchup - 3D CS (Due April 4) |
| 7    | 03/07 & 03/09 | In-Person Group Lab (HB 207) | Lab L  
Lecture Qs |

Lecture 9: The Collection, Packaging and Preservation of FINGERPRINT Evidence
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<tr>
<th>Week</th>
<th>Dates</th>
<th>Lecture(s)</th>
<th>In-Person Labs (HB 207)</th>
<th>Fingerprint Lab</th>
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<td>8</td>
<td>03/14 &amp; 03/16</td>
<td><strong>Lecture 9 (Cont’d)</strong></td>
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<td><strong>In-Person Labs (HB 207)</strong></td>
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<td><strong>Fingerprint Lab</strong></td>
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<td>9</td>
<td>03/21 &amp; 03/23</td>
<td><strong>Lecture 10:</strong> The Collection, Packaging and Preservation of BLOOD Evidence</td>
<td>Lecture Qs</td>
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<td><strong>Lecture 11:</strong> Impression Evidence</td>
<td>Lecture Qs</td>
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<td><strong>Lecture 12:</strong> Firearms Evidence</td>
<td>Lecture Qs</td>
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<td>10</td>
<td>03/28 &amp; 03/30</td>
<td><strong>Spring Recess</strong></td>
<td>SketchUp – 3D CS Due Apr 4</td>
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<td><em>(March 28-April 1)</em></td>
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<td><strong>March 31 – Cesar Chavez Day (Campus Closed)</strong></td>
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<td>11</td>
<td>04/04 &amp; 04/06</td>
<td><strong>Lecture 13:</strong> Drug Evidence</td>
<td>Chapter 7 Lecture Qs</td>
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<td><strong>Lecture 14:</strong> Death Investigations</td>
<td>Chapter 7 Lecture Qs</td>
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<td>12</td>
<td>04/11 &amp; 04/13</td>
<td><strong>Lecture 14:</strong> Death Investigations (Cont’d)</td>
<td>Lectures 7-13</td>
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<td><strong>Midterm 2</strong></td>
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<td>13</td>
<td>04/18 &amp; 04/20</td>
<td><strong>Lecture 15:</strong> Digital Evidence &amp; Technologies Currently Used to Assist with CSIs</td>
<td>Chapter 9 Lecture Qs</td>
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<td>Chapter 10</td>
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<td>14</td>
<td>04/25 &amp; 04/27</td>
<td><strong>Lecture 16:</strong> Underwater and Underground Scenes, and CS Reconstruction (Pre-rec’d)</td>
<td>Crime Scene Report 1</td>
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<td><strong>In-Person Group Labs</strong></td>
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<td>Mock Crime Scene Exercise 3, Odd Teams 1,3,5</td>
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<td>Mock Crime Scene Exercise 3, Even Teams 2,4,6</td>
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<td>15</td>
<td>05/02 &amp; 05/04</td>
<td><strong>Lecture 17:</strong> Commonly Encountered Crime Scenes: Arson and Explosives (Pre-rec’d)</td>
<td>Crime Scene Report 2</td>
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<td><strong>In-Person Group Labs</strong></td>
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<td>Mock Crime Scene Exercise 1, Odd Teams 1,3,5</td>
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<td>Mock Crime Scene Exercise 1, Teams 4-6</td>
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<tr>
<td>16</td>
<td>05/09 &amp; 05/11</td>
<td><strong>In-Person Group Labs</strong></td>
<td>Crime Scene Report 3</td>
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<td>Mock Crime Scene Exercise 2, Odd Teams 1,3,5</td>
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<td>Mock Crime Scene Exercise 2, Even Teams 2,4,6</td>
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<td>17</td>
<td>05/16</td>
<td><strong>Review Session/Study Period</strong></td>
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<td>Final Exam</td>
<td>05/20</td>
<td><strong>Final –Cumulative Exam (Theory and Practical) (7:15a-9:30a)</strong></td>
<td>Cumulative</td>
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<td>Refer to link below for exam dates and times.</td>
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* Topic(s) subject to change. Possible guest speaker(s). Students are responsible for taking detailed notes as they will be tested on the subject matter.

** Assigned homework for the week. All assignments are due one week after their assignment, unless stated otherwise.