Course information

• Digital Forensics
- CSC5372
- Winter / 2026
- Hybrid
- Lecture; On-line

Faculty contact information

- Doug Witten
- 5057 Woodward,
  Macabee Building 14110.2
- By appointment
- d.witten@wayne.edu

Course materials
Required textbook(s)

B. Nelson, A. Phillips, C. Steuart, R. Wilson. *Guide to Computer Forensics and Investigations, 7th Edition*. Cengage Learning, ISBN: 9780357672884.

Course Description:

Digital Forensics and Incident Response (DFIR) is essential for understanding how intrusions occur, uncovering malicious behavior, explaining exactly what happened, and restoring integrity across digital environments. DFIR combines cybersecurity, threat hunting, and investigative techniques to identify, analyze, respond to, and proactively hunt cyber threats and criminal activity.

Course Learning Outcomes:

The course learning outcomes are skills and abilities students should have acquired by the end of the course. Upon successful completion of this class, the student will be able to:

O1 - Explain how to prepare for computer investigations and summarize the difference between public-sector and private-sector investigations.

O2 - Explain the importance of maintaining professional conduct while taking a systematic approach to digital forensics, along with the importance of reports and testimony.

O3 – Describe and explain digital Storage procedures, hashing techniques, and disk encryption.

O4 - Discover, describe, and explain artifacts.

O5 – Demonstrate how to locate and recover hidden files.

O6 – Demonstrate how live acquisitions are performed.

O7 – Explain how to conduct cloud investigations.

O8 – Analyze various SIEM logs and how to interpret them.

Assessment:

Assignment	30%
Projects	20%
Mid Term	20%
Final Exam	30%

Total	100%

Grading Scale:
The course grades will be based on the percentages listed below.

A	94 - 100%	C	74 - 76%
A-	90 - 93%	C-	70 - 73%
B+	87 - 89%	D+	67 - 69%
B	84 - 86%	D	64 - 66%
B-	80 - 83%	D-	60 - 63%
C+	77 - 79%	F	0 - 59%

Tentative Course Schedule:

Week	Reading	Tentative Assignment timeline
1	Systems Fundamentals / Virtual Machine Setup	Assignment 1

2	Understanding Digital Forensics and Investigations	Assignment 2
3	Report Writing	Assignment 3
4	Digital Forensic Tools	Project 1
5	Data Acquisition	
6	Processing Crime and Incident Scenes	Assignment 4
7	**Midterm** Working with Windows systems	
8	Media Files	Project 2
9	VM Forensics and Live Acquisitions	
10	Network Forensics	Assignment 5
11	Cloud Forensics	Assignment 6
12	Mobile Devices	Project 3
13	Email and Social Media	
14	e-Discovery	Assignment 7
15	Ethics and Professional Responsibilities	Assignment 8
16	Final Exam Thursday April 30th, 2025	

Grading Policies:

1. *There will be a 5-day window for late assignments, reducing by 20% each day late. NO assignments will be accepted after the 5-day late period.*
2. Make-up examinations for exams will not be given without prior approval.
3. **You are responsible for checking your grades after each assignment and reporting** an inconsistent grade to the instructor no later than seven days after the assigned grade. The grade will be final after seven days of posting it on Canvas.
4. All students must regularly access their Wayne State e-mail account. You may be contacted when essential matters arise. If you have any questions about the course or need assistance, please get in touch with the instructor or the TA via Zoom during office hours or by e-mail.

University Policies

Religious holidays (from the online Academic Calendar)

Because of the extraordinary variety of religious affiliations among the University's student body and staff, the Academic Calendar does not provide for religious holidays. However, it is the University's policy to respect the individual's faith and spiritual obligations. Students with classes or examinations that conflict with their religious observances must notify their instructors well in advance to work out mutually agreeable alternatives.

Student Disability Services

If you have a documented disability requiring accommodations, you must register with Student Disability Services (SDS) to coordinate your academic accommodations. Please visit https://studentdisability.wayne.edu to register your

condition. Once you have accommodations in place, please inform your instructor. Student Disability Services' mission is to assist the University in creating an accessible community where students with disabilities have an equal opportunity to participate fully in their educational experience at WSU. SDS supports students with a variety of conditions, such as mental health disorders, learning disabilities, chronic health conditions, etc.

Counseling and Psychological Services (CAPS)

It is pretty standard for college students to experience mental health challenges, such as stress, anxiety, and depression, that interfere with academic performance and negatively impact daily life. Help is available for any currently enrolled WSU student who is struggling with a mental health difficulty. Go to https://caps.wayne.edu for information on the services offered and how to access them. Other options for students and non-students include the Mental Health and Wellness Clinic at the College of Education (https://education.wayne.edu/mental-health-and-wellness-clinic). Services at all these clinics are free and confidential. Remember that getting help before stress reaches a crisis point is an innovative and courageous thing to do – for yourself and for those you care about. CAPS provides after-hours/weekend crisis support: students living on campus can call (313) 577-2277, and for all others, call (313) 577-9982. In a life-threatening emergency, call the WSU Police at 313-577-2222.

Sexual Misconduct and Title IX

Most faculty and staff are considered **"Responsible Employees."** **They are required to report** information they receive about incidents of sexual misconduct (including sexual assault, stalking, dating/domestic violence, and sexual harassment) to the Title IX Coordinator when it involves a student.

Confidential support is available 24/7 through the [Rape, Abuse & Incest National Network (RAINN) (https://www.rainn.org/)](https://www.rainn.org/). Call **1-800-656-4673** or [Chat (https://hotline.rainn.org/online)](https://hotline.rainn.org/online) with a professional support specialist.

Options for Self-Reporting Sexual Misconduct

Any student impacted by sexual misconduct or harassment has the right to report to the University (e.g., Responsible Employee or Title IX Coordinator), law enforcement (e.g., WSUPD or other jurisdiction), or neither. Every Warrior is encouraged to make the right reporting decision for themselves.

Reporting to the University

The [Title IX Office (https://titleix.wayne.edu/)](https://titleix.wayne.edu/) is available to consult individuals impacted by sexual violence or discrimination regarding resource referrals, supportive and protective measures, and reporting and resolution options. Where WSU has jurisdiction, the affected party may request an administrative investigation by the University.

Phone: 313-577-9999

Email: TitleIX@wayne.edu

Reporting to Law Enforcement

The [WSU Police Department (https://police.wayne.edu/)](https://police.wayne.edu/) is available 24/7 to assist individuals reporting criminal activity or concerns on or near campus. Report off-campus incidents to the appropriate police jurisdiction. Reporting to the police in the event of an emergency or imminent threat is highly encouraged.

Phone: 313-577-2222

Every Warrior has the right to live, learn, and work at WSU – free from Harassment or Discrimination. If you or someone you know has been impacted by sexual violence or discrimination, please visit TitleIX.wayne.edu to learn more about resources and support on campus and in the community.

Food Pantry and Basic Needs

Wayne State has a food pantry, a free resource for all students. The hours are on the website: https://thew.wayne.edu/pantry.

Learning is always more challenging when you are struggling to meet basic needs. Wayne State recognizes that you may face several challenges during your time here, and we are here to support you. Any student who faces challenges securing food, housing, or medical care is encouraged to contact relevant university offices noted on the Financial Aid website (https://wayne.edu/financial-aid/) for support. You are also encouraged to contact Care, Support, and Intervention services in the Dean of Students Office (DOSO) for assistance connecting to resources for basic needs. Students can call DOSO at 313-577-1010 or submit a care referral form (https://doso.wayne.edu/conduct/student-support-intervention).

Academic Dishonesty – Plagiarism and Cheating

Academic misconduct (https://doso.wayne.edu/conduct/academic-misconduct) is any activity that compromises the institution's academic integrity or undermines the education process. Examples of academic misconduct include:

- **Plagiarism:** To take and use another's words or ideas as your own without appropriate referencing or citation.
- **Cheating:** Intentionally using or attempting to use or intentionally providing unauthorized materials, information, or assistance in any academic exercise. This includes copying another student's test paper, allowing another student to copy from your test, using unauthorized material during an exam, and submitting a term paper for a current class that was previously submitted in a past class without appropriate permission.
- **Fabrication:** Intentional or unauthorized falsification or invention of any information or citation, such as knowingly attributing citations to the wrong source or listing a fake reference in the paper or bibliography.

- **Other:** Selling, buying, or stealing all or part of a test or term paper, unauthorized use of resources, enlisting in the assistance of a substitute when taking exams, destroying another's work, threatening or exploiting students or instructors, or any other violation of course rules as contained in the course syllabus or other written information.

Such activity may fail a specific assignment, an entire course, or, if flagrant, dismissal from Wayne State University.

Course drops and withdrawals

For courses running the entire term, students can drop this class and receive 100% tuition and course fee cancellation for the first two weeks. After the second week, there is no tuition or fee cancellation. Students who wish to withdraw from the class can withdraw on Academica (https://academica.wayne.edu/). You will receive a W mark at the time of withdrawal. No withdrawals can be initiated after the deadline. Students enrolled beyond the deadline will receive a grade. Because withdrawing from courses may have negative academic and financial consequences, students considering course withdrawal should ensure they fully understand all the consequences before taking this step, including speaking with their instructor or advisor. More information on course drops and withdrawals can be found on the Registrar's website (https://wayne.edu/registrar). For classes shorter than the entire term, deadlines for dropping and withdrawal can be found in the section's details in the Schedule of Classes (https://registration.wayne.edu/).

Student Services

The Academic Success Center

The Academic Success Center (1600 Undergraduate Library) assists students with content in select courses and strengthens study skills. Visit the Academic Success Center (https://success.wayne.edu/) for schedules and information on study skills

workshops, tutoring, and supplemental instruction (primarily in 1000 and 2000-level courses).

The Writing Research and Technology Zone

The Writing Research and Technology Zone is located on the 2nd floor of the Undergraduate Library and provides individual tutoring consultations free of charge. Visit the Writing Research and Technology Zone (http://clas.wayne.edu/writing) to obtain information on tutors, appointments, and the type of help they can provide.

Library research assistance

Are you working on a research assignment, paper, or project? Are you trying to figure out how to collect, organize, and cite your sources? Request an appointment with a Wayne State librarian (https://library.wayne.edu/forms/consultation_request.php), who can provide on-campus or online personalized help.