

DFOR 670
Fraud Analytics
Fall 2024

Instructor: Bob Osgood rosgood@gmu.edu¹

Engr 3800 Office Hours Thursday 2:00 PM – 5:00 PM
in-person or by phone (703-993-5443²), and also by appointment

Class Meets: **Day:** Friday
 Time: 4:30 PM – 7:10 PM
 Where: ENGR 4457

Course Description: Looks at financial information from a forensic perspective. Financial statement analysis, detection techniques, computer aided investigative processes, fraud detection, money laundering, and other topics are covered. The class culminates in a final project where the student will present their findings to the class.

Course Goals: Prepares students to undertake forensic analysis of financial statements and business records. This is a specialty practice area of investigations closely dependent on digital forensics. Digital forensics and fraud analysis are closely linked. You will develop the necessary expertise and be prepared to give expert evidence in any resultant legal proceedings.

Class Logistics: This course is in class but is designed to be both synchronous and asynchronous meaning that lectures are also pre-recorded. We will be meeting every Friday at 4:30 PM. Prior to Friday, you need to review all material for the lecture including the instructional videos. The live in-class lecture will consist of a review and discussion of the lecture material for that week. Preparation is key for every class. The review/discussion time will vary based on **your** involvement.

Prerequisites: A working knowledge of financial statements and accounting, but I will give you a crash course in financial statements.

Honor Code: The Mason Honor Code is in effect <https://oai.gmu.edu/full-honor-code-document/>

Mason Calendar: https://registrar.gmu.edu/calendars/fall_2024/

The above link will provide you with Mason's important dates and deadlines.

Course Schedule: (Subject to Change)

Class begins on Friday, 8/30/2024. The class exam will be online on Friday, 11/15/2024. Quizzes will be given as needed. Project presentations start on 11/22/2024.

¹ Keep emails short and to the point

² You can call at any time and leave a message.

Week	Topic	Reading Assignments
1 8/30	Introduction DFOR 670 Forensic Investigation & Financial Audits – Compare & Contrast	Blackboard Notes Zack Ch 19
2 9/6	Library Resources Potential Red Flags & Fraud Detection Techniques	Zack Ch 1, 15
3 9/13	Financial Statement Fraud: Revenues and Receivables Project Topic Due	Zack Ch 2, 3, 4 Project Topics Due
4 9/20	Financial Statement Fraud: Other Schemes and Misappropriations	Zack Ch 6, 7, 9
5 9/27	Analyzing Financial Statements	Zack Ch 16 and 17
6 10/4	Computer Aided Forensic Accounting Investigative – Data Mining Part 1 (Ratio Quiz)	Blackboard Notes
7 10/11	Data Mining Part 2 (SQLite)	Blackboard Notes
8 10/18	Money Laundering (SQLite Quiz)	Blackboard Notes
9 10/25	Psychology of the Fraudster	Blackboard Notes
10 11/1	Financial Reporting Fraud & Other Capital Markets	Zack Ch 12
11 11/8	Non-financial Information	Blackboard Notes Zack Ch 18
12 11/15	Exam	Blackboard Notes Projects Due
13 11/22	Project Presentations	
11/29	No Class – Thanksgiving Break	
14 12/6	Project Presentations	
15 12/13	Project Presentations	

Course material is self-contained on Canvas. I highly recommend you buy Zack's book (see below) since it will help you tremendously with financial statement analysis. Lectures are broken up by module. Canvas also contains content modules for both the Enron and WorldCom frauds. We will cover this material as we work through other material during the semester. These frauds are so significant that they require their own modules. Complete the review of this material and its entirety by the time of the exam on 11/15.

Chapter and page references in the notes on Canvas refer to A Guide to Forensic Accounting Investigation (1st and 2nd Ed's). To reduce cost, these text are excellent but not required.

Grading:	Exams/Quizzes:	40%
	Project Topic:	1%
	Project:	39%
	Project Executive Summary	10%
	Project Presentation:	<u>10%</u>
	Total	100%

Project: See Project Document – In Assignments on Canvas

Exam: The format of the exam will be a combination of multiple choice, fill-in, and short answer questions. Expect approximately 50 – 70 questions. The exam is open book/notes, open computer, no search engines. The exam is timed (2 hours). Calculators are allowed. Case studies **will** be on the exam. Quizzes will follow a similar format.

Required Reading and Reference Material:

Required: **Financial Statement Fraud**
 Gerard M. Zack
 Wiley & Sons, Inc.
 ISBN: 978-1-118-30155-5

Supplemental: A Guide to Forensic Accounting Investigation
 Not Required Golden, Skalak, and Clayton and Pill (2nd Edition)
 But Great Sources Wiley & Sons, Inc
 ISBN: 10-0471-46907-6 (1st Edition)
 ISBN: 13-978-0-470-59907-5 (2nd Edition)

Reading Financial Reports for Dummies
 Lita Epstein, MBA
 Wiley & Sons, Inc
 ISBN: 978-0-470-37628-7

Financial Statement Analysis – A Practitioner’s Guide
 Martin Fridson and Fernando Alvarez
 Wiley & Sons Inc
 ISBN: 978-0-470-63560-5

References from the Web include the following sites:

www.sec.gov
www.doj.gov
www.aicpa.org
<http://pcaobus.org>
<http://www.cert.org>

Students with disabilities who seek accommodations in a course must be registered with the Mason Office of Disability Services (ODS) and inform the instructor, in writing, at the beginning of the semester. See <https://ds.gmu.edu/> or call 703-993-2474 to access the ODS.

Course Material: All course material is available on Mason Canvas (<https://canvas.gmu.edu>).

How do you get on Canvas?

- Go to: <https://canvas.gmu.edu>
- Login with your Mason Credentials
- Click on the Courses icon
- Click on the DFOR 670

Note: ALL STUDENTS MUST HAVE A MASON EMAIL ACCOUNT AND HAVE ACCESS TO CANVAS!!!

Note: All Email Correspondence Will Take Place From Your Mason Account to rosgood@gmu.edu!!!

Note: All Students Are Responsible for All of the Material in This Syllabi.