ACC 3202 (Spring 2026)

Accounting Information Systems and Data Analytics

Instructor: Hunter Ng (hunterboonhian.ng@baruch.cuny.edu)

Office: Vertical Campus 7-155, (Office Hours 1300-1400 Saturdays 12-222)

Class Time: Saturdays – 0905-1250 (2 breaks of 10 mins each at 1020 & 1145)

Disclaimer: **This syllabus is subject to change at any time. You will need a laptop for this class. If you do not have one, you can borrow one from Technology Loan Service.**

Course Description and Learning Goals

This course is an introduction to accounting information systems and data analytics in accounting. The primary learning objectives are to (1) understand enterprise accounting information systems, (2) apply data analytics to solve problems in accounting and other business areas. Throughout the course, you will receive hands-on experience with applying data science techniques through a series of technical labs and assignments. Topics covered include accounting information systems and business processes, BPMN, UML, SQL, XBRL, encryption, database management, COSO and COBIT framework, data cleaning and practical techniques such as CART, neural network, vibe coding, with hands-on projects that are suitable for entry-level data analyst jobs.

For this course, I will cover both academic and practical skills for AIS/DA. I will cover this in Excel, Access, Tablea, SQLite, Python, RPA programs (Automa, OpenRPA)

Course Meeting Dates

Location – Vertical Campus 7-155

N	Date	Day	Topics Covered	Connect Assignment Start Date / Remarks
1	31 Jan	Saturday	History of AIS, What AIS practitioners do, Job Scope, General Terms, BPMN - Kahoot Ice-Breaker - In the lap of truth - Introduction to syllabus Break 1 - AIS C1 Break 2	Connect due **three weeks** later on the same Saturday, 2359.

			- AIS C1	

2	7 Feb	Saturday	Business Process Modelling Revision, UML
			Break 1
			   - AIS C2
			Break 2
			   - AIS C2
			   - Camunda BPMN
			   - Practice Drawing using an example
				''

3	14 Feb	Saturday	UML, Relational Databases, Processes and XBRL
			Break 1
			   - AIS C3
			Break 2
			   - AIS C3
				''

4	21 Feb	Saturday	UML, Relational Databases, Processes and XBRL
			Break 1
			   - AIS C4 – SQL (w3school commands)
			Break 2
			   - AIS C4 – SQL (w3school commands)
				''

5	28 Feb	Saturday	XBRL, ACCESS DEMO
			Break 1
			   - AIS C9
			Break 2
			   - AIS C9
			QUIZ 1
				''
				SQL INDIVIDUAL PROJECT 1 RELEASED
				
				VIBE CODING INDIVIDUAL PROJECT 2 RELEASED

6	7 Mar	Saturday	AIS Internal Controls, Encryption, Monitoring – COSO, COBIT
			Break 1
			   - AIS C13, 14, 15
			Break 2
			   - AIS C13, 14, 15
			QUIZ 2	

7a	14 Mar	Saturday	**Mid-Terms HELD ONLINE** 💯 💯 💯	
7b	21 Mar	Saturday	Data Analytics 1, DA C1 Break 1 - DA C1 , C2, C3 Break 2	

			Tableau Introduction (https://www.youtube.com/watch?v=KlAKAarfLRQ)	
8	28 Mar	Saturday	Data Analytics 2 – Types of Data, Data Cleaning Break 1 - Tableau Demo Break 2 DA 6,7,8,9,10	Connect due **three weeks** later on the same Saturday, 2359.
	4 Apr	Saturday	**SPRING RECESS – NO LESSONS** 🌸 🌸 🌸	''
9	11 Apr	Saturday	Data Analytics 3 – Techniques (CART, Neural Network Python) Break 1 - DA Break 2 - Python Exercise	Connect due **three weeks** later on the same Saturday, 2359.
APRIL 13 - LAST DAY TO WITHDRAW WITH A GRADE OF W
10	18 Apr	Saturday	DA Optional Project – Titanic Kaggle using Python Break 1 - How to program a Bot to automate tasks and data analysis (buy tickets to concerts) Break 2 - Data Analytics 4 – Techniques (CART, Neural Network Python) Quiz 3	''
11	25 Apr	Saturday	AGILE Group Project (IN CLASS)	GROUP PROJECT – 10% OF GRADES
12	2 May	Saturday	DA Optional Project – Titanic Kaggle using Python Break 1 - Data Analytics 5 Break 2 - Talk by External Speaker	
13	9 May	Saturday	Finals Review Break 1 - Finals Review Break 2 - LUNCH IN CLASS	
14	16 May	Saturday	**FINALS** 💯 💯 💯	

Course Materials (Pre-requisite 1)

COMPULSORY TO BUY AS PER DEPARTMENT REQUIREMENTS -
https://connect.mheducation.com/class/h-ng-spring-2026-acc3202

ACC 3202 - Accounting Information Systems and Data Analytics (ISBN: 9781264489121). This textbook is customized for Baruch and combines selected chapters from the following two textbooks:

Introduction to Data Analytics for Accounting (**"DA"**), 2e, Richardson, Terrell, Teeter.

Accounting Information Systems (**"AIS"**), 3e, Richardson, Chang, and Smith.

You can purchase stand-alone Connect access (with immediate access to e-book but NOT hard copy) at a discounted price (~$93.28). To buy the stand-alone Connect access, click "Link to Connect" from the Blackboard course menu on the left, then click "Go to My Connect Section". Follow the on-screen instructions to register. Caveat: the open-book midterm and/or final exams may use an online proctoring system that will, for the duration of the exam, "lockdown" the student's computer or web browser so that it can be used only for the exam page. This means that while you can still refer to any printed materials including the textbook, you will not have access to the e-book on Connect during the exam.

ALTERNATIVELY, IF YOU WANT A HARD-COPY OF THE TEXTBOOK, the bundled version of this custom textbook (~$100.40) includes the physical text, digital e-book, and Connect access for BOTH textbooks. Please purchase it directly from the McGraw Hill website using this link:

You will receive the loose-leaf book within one week of purchase. In the meantime, you can use the two-week free trial ("courtesy access") of Connect. Once your book arrives, use the scrap card to update your Connect credentials.

McGraw-Hill Connect (Pre-requisite 1)

Access to Connect is required for this course. All assignments and exams will be available through McGraw Hill Connect unless otherwise specified. To access the Connect course web address, click "link to Connect" from the Blackboard menu items on the left, then click "Go to My Connect Section". Follow the on-screen instructions to register or sign in. Please register for Connect using your Baruch email only

Using Connect: http://mpss.mhhe.com/assets/Student_Quick_Tips.pdf. Live chat with a representative is usually the quickest way to get your questions answered:

https://mhedu.force.com/CXG/s/ContactUs OR (800) 331-5094: Call live rep during these hours:

Sunday: 12:00 PM to 12:00 AM EST | Monday-Thursday: 24 hrs | Friday: 12:00 AM to 9:00 PM EST | Saturday: 10:00 AM to 8:00 PM EST

Textbooks

We will cover AIS C1, C2, C3, C4, C9, C13, C14, C15, C16, C18. DA – C1 to C10

Other Requirements (Pre-requisite 2)

I will be communicating through BrightSpace and the emails you have saved on Brightspace. If your email is not working and you are not receiving my emails, you should check your email settings or email Baruch IT helpdesk. I will assume that you are receiving my emails and no exception will be made for students not receiving my announcements. A laptop or desktop with a reliable Internet connection is required for this course. I will also use three softwares in this course – Excel, Tableau, Python. Exel is proprietary Microsoft software, while Tableau is free for students and Python is free for everyone.

Grade Distribution Standards for Accounting 3000 Level Courses

Grade	Percentage
A	20-25%
A and B	40-50%
A, B, and C	75-88%
D, F, W, and INC	15-25%

Grade Components

Attendance	4
Connect Homework – AIS (Various Due Dates)	12.5
Midterm Exam – AIS – Online	15
Quizzes (3 in total, 4% each) – Hardcopy in Class	12
Connect Homework – DA (Various Due Dates)	12.5
Final Exam – DA – Hardcopy in Class	20
Individual Project 1 – SQL Commands	8
Individual Project 2 – Vibe Coding	8
Group Project (AGILE)	8
Total	**100**
Bonus – Kaggle Project	5*
Bonus – Ticketing Bot Coding	1*

Grading Curve

Depending on the class performance, I will curve the performance accordingly. **The grade distribution standards take precedence before your actual marks. I may or may not follow the grade distribution standards. Therefore, your actual marks may be lower or higher, depending on your relative position in class. If you do not agree with this, you should register for other instructors' classes.**

Participation and Bonus Credits for Python

Attendance is compulsory. I will do a roll call 5 minutes after class starts. This is a physical class, not a distance learning class. If you would prefer an online-only class, please sign up for another class accordingly.

Attendance will be taken for each physical class. Students who are late with valid reasons may be excused. You are to inform me by email before class starts. **Any emails sent after class starts will not be entertained.**

There will be a 5% bonus credit for a Kaggle project and information will be given closer to the date. **If you miss the classes, I will not entertain any emails asking for information about it.** It is designed to build up your DA skills and for me to monitor your participation in class. Everything you need is in the brief. Any late submissions will be ignored, without any reason.

Connect Grading

Every homework will be due 2 weeks after it is assigned, on the same Saturday 2359. For the first week, I will grant 3 weeks of time due to administrative issues. **To be fair to the entire class, I will not entertain any emails asking for extensions via any form of reason.**

Final Project

The final project will consist of presenting a case. **It will take place physically in class**. If you cannot attend the class, please let me know in advance. The project is meant to simulate a real-world AGILE methodology so you will need to be physically present to complete it in a randomly-assigned group.

Individual Projects

The individual projects will consist of two take-home cases. Once the lesson is covered, the brief and submission portal will be open. Students will have about a month to complete the individual project, which will be due shortly after the midterms.

Links - TBD

Midterm and Finals and Policy Regarding Make-up Exams

The midterm is administered online, under Connect.

The final is administered in class, closed-book.

There will be no make-up midterm/finals examinations under any circumstances. If you are unable to make it due to extraordinary reasons, you need to inform me a week before the actual date and I can make alternative arrangements at my discretion. If you miss the exams because of a medical or family emergency, you will need to provide valid documentation. In this case, I will decide how to grade you in lieu of the missed exam. **Your grades for the component will be entirely at my discretion if you are absent, with or without reason.**

Office Hours

Office hours are by appointment. If you are not coming to class and asking for office hours, I will decline your request. If you are coming to class regularly, I will be most willing to offer additional help.

Academic Integrity and Cheating

I do not tolerate any form of violation of academic integrity. Please read the College's Academic Honesty website at https://provost.baruch.cuny.edu/academic-affairs/academic_honesty/. My policy is to give a grade of D or F to any assignment where I find cheating. In addition, I will

submit a report to the Office of Dean of Students. This report becomes part of your permanent file.

Accommodations And Assurance of Learning

Please let me know if you have any disabilities and are requesting an accommodation. Please contact the Student Disability Services (disability.services@baruch.cuny.edu). All discussions are confidential. Refer to https://zicklin.baruch.cuny.edu/faculty-research/faculty-staff/assurance-of-learning/ for assurance of learning. Please let me know if you need any other help, such as mental health matters, family matters. Thank you.

BBA Learning Goals	Significant Part of Course	Moderate Part of Course	Minimal Part of Course	Not Part of Course
Analytical Skills	X			
Technology and Data Literacy	X			
Communication Skills: Oral			X	
Communication Skills: Written			X	
Civic Awareness and Ethical Decision-Making			X	
Global Awareness				X

Assignments	Course Learning Goals	BBA Learning Goals
Connect Assignments	Learn AIS and DA concepts in an academic and practical manner, and the underlying theory	Analytical Skills Civic Awareness and Ethical Decision-Making
Midterms	Solidify understanding of DA concepts and to gauge student's progress	Technology and Data Literacy
Finals	Solidify understanding of AIS concepts and to gauge student's progress	Technology and Data Literacy
Final Project	Trains students to apply the practical skills learnt in the class to a tangible, real-life project	Analytical Skills Communication Skills: Oral Communication Skills: Written