NYU Madrid
TECH-UB 9001.M01
Information Technology in Business and Society

Instructor Information

- Name: Asier Sarasua Amundarain
- Office hours: Every Thursday from 8:20-8:50pm and by appointment
- Email address: asier.sarasua@nyu.edu

Course Description and Desired Outcomes

This course is premised on the idea that information technology changes society and business in understandable, if not always predictable, ways. We will focus on what information technology does—and is doing—to individual workers, firms, markets and economies. By the end of the course, you will be able to reason through questions at the intersection of technology and society.

A secondary goal is to expose you to a variety of technologies and methods that are having a large impact on how we understand and interact with the ordered world. Examples include relational databases, online advertising, data analytics, data visualization and recommender systems. This secondary and more practical focus of the course is designed not necessarily to give you a mastery in these technologies, but rather to get you from “don’t know what you don’t know,” to “know what you don’t know.” We live in a golden age for autodidacts, but you still must know what to learn.

- Co-requisite or prerequisite: N/A
- Class meeting days and times: Thursdays 5:30-8:20pm

Assessment Components
Class Participation

Students will be graded on quality class participation based on bringing up debates and adding valuable insights to the class discussions.

SQL Assignment

SQL Graded assignment where students will need to answer several questions on SQL knowledge to test their understanding on the topic.

Individual Written Assignment

You will have one individual writing assignment—available on September 7 and due on October 11—focusing on Business Strategy. We will also be considering key areas such as clarity, brevity and grammar. It is critical that the essays you turn in appear professional and indicate that you have read over all your answers before submission. In essence, we want you to treat this writing assignment as you would a report a future employer might ask you to do.

Lastly, as you are working on this assignment, please remember that you are being asked to analyze strategy in a *business context*. The word “strategy” is used quite often in the English language, and can mean several different things. The *business* definition of strategy, however, is more specific; this is the definition we want you to use.

In addition to the report, students will need to present their essay in a 2-3 minute elevator pitch.

Final Group Project

There is a final, capstone group project, “Commercializing a Technological Innovation.” Further information regarding the group project will be released closer to the end of the semester.

Final Exam

There will be an exam to test students for the concepts learnt in class. Syllabus is finalized.

Grading of Assignments

The grade for this course will be determined according to the following formula:

<table>
<thead>
<tr>
<th>Assignments/Activities</th>
<th>% of Final Grade</th>
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<tbody>
<tr>
<td>Class participation</td>
<td>10%</td>
</tr>
<tr>
<td>SQL assignment</td>
<td>15%</td>
</tr>
<tr>
<td>Individual Written assignment</td>
<td>20%</td>
</tr>
<tr>
<td>Final Group Project</td>
<td>35%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
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</tbody>
</table>
Failure to submit or fulfill any required course component will result in failure of the class, regardless of grades achieved in other assignments.

**STERN School Guidelines for Grading for Core Courses**

At NYU Stern, we strive to create courses that challenge students intellectually and that meet the Stern standards of academic excellence. To ensure fairness and clarity of grading, the Stern faculty have adopted a grading guideline for core courses with enrollments of more than 25 students in which approximately 35% of students will receive an “A” or “A-” grade. In core classes of less than 25 students, the instructor is at liberty to give whatever grades they think the students deserve, while maintaining rigorous academic standards.

**Course Schedule**

**Topics and Assignments**

<table>
<thead>
<tr>
<th>Week/Date</th>
<th>Topic</th>
<th>Reading</th>
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</thead>
<tbody>
<tr>
<td>Session 2, February 7th</td>
<td>S3: Impact of Technology in the real world</td>
<td>Computer Needed</td>
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<tr>
<td></td>
<td>S4: SQL I</td>
<td></td>
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<tr>
<td>Session 3, February 14th</td>
<td>S5: SQL II</td>
<td></td>
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<td>S6: SQL III</td>
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<tr>
<td>Week/Date</td>
<td>Topic</td>
<td>Reading</td>
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<td>-----------------</td>
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<td>------------------------------------------------------------------------</td>
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</tbody>
</table>
| Session 6, March 7th | S11: Foundation on IT Problems  
Department of Business Informatics & Operations German University in Cairo (GUC), 2014. |
| Session 7, March 14th | S17 & S18: Individual assignment presentation        |                                                                        |
| Session 8, March 21st | S13: Data exploration tools: Dataiku  
S14: Other data exploration tools | Previous Dataiku (newclasses.nyu.edu/x/N8PfkV) software installation. |
| Session 9, March 28th | S13: Data visualization tools  
S14: Data visualization II | Previous Graphext (graphext.com) configuration |
| Session 10, April 4th | S19: Crowdsourcing  
| Session 11, April 11th | S21: Pricing Strategies  
Entrepreneur, 2016.  
Libert, Barry; Beck, Megan and Wind, Yoram. “3 Ways to Get Your Own Digital Platform”.  
| Session 12, May 9th | S23: Payments & Bitcoin  
S24: Robotics | Schrodт, Paul. “Cryptocurrency will replace national currencies by 2030, according to this futurist”.  
Time, 2018.  
| Session 13, May 10th | S25 & S26: Group presentations |                                                                        |
| Session 14, Exams Week | S27&S28: Final Exam: TBA  
Final Exam Week |                                                                        |

**Required Co-curricular Activities**

N/A

**Course Materials**
Required Textbooks & Materials in NYU Classes


Chen, Angela. “Why trying to be to efficient will make us less efficient in the long run”. The verge, 2018.

Dataiku (newclasses.nyu.edu/x/N8PfkV)


Graphext (graphext.com)


Schrodt, Paul. “Cryptocurrency will replace national currencies by 2030, according to this futurist”. Time, 2018.


Optional Textbooks & Materials

Resources

• Access your course materials: NYU Classes (nyu.edu/its/classes)
• Databases, journal articles, and more: Bobst Library (library.nyu.edu)
• Assistance with strengthening your writing: NYU Writing Center (nyu.mywconline.com)
• Obtain 24/7 technology assistance: IT Help Desk (nyu.edu/it/servicedesk)
Course Policies

Attendance Policy

Study abroad at Global Academic Centers is an academically intensive and immersive experience in which students from a wide range of backgrounds exchange ideas in discussion-based seminars. Learning in such an environment depends on the active participation of all students. And since classes typically meet once or twice a week, even a single absence can cause a student to miss a significant portion of a course. To ensure the integrity of this academic experience, class attendance at the centers is mandatory, and unexcused absences will be penalized with a two percent deduction from the student’s final course grade for every week's worth of classes missed. Students are responsible for making up any work missed due to absence. Repeated absences in a course may result in harsher penalties including failure.

Unexcused absences affect students’ grades: In classes meeting once a week, a 2% deduction from the student’s final course grade occurs on the occasion of the first unexcused absence.

Absences are excused only for illness, religious observance, and emergencies.

Illness: For a single absence, students may be required to provide a doctor’s note, at the discretion of the Assistant Directors of Academics. In the case of two consecutive absences, students must provide a doctor’s note. Exams, quizzes, and presentations will not be made up without a doctor's note.

Religious Observance: Students observing a religious holiday during regularly scheduled class time are entitled to miss class without any penalty to their grade. This is for the holiday only and does not include the days of travel that may come before and/or after the holiday. Students must notify their instructor and the Academic Office in writing via email one week in advance before being absent for this purpose. If exams, quizzes, and presentations are scheduled on a holiday a student will observe, the Assistant Directors, in coordination with the instructor, will reschedule them.

Please note: if you are unable to attend class, you are required to email your professors directly and notify them.

Late Submission of Work

Late submission of work won’t be accepted.

Academic Honesty/Plagiarism

At NYU, a commitment to excellence, fairness, honesty, and respect within and outside the classroom is essential to maintaining the integrity of our community.

Plagiarism: presenting others' work without adequate acknowledgement of its source, as
though it were one’s own. Plagiarism is a form of fraud. We all stand on the shoulders of others, and we must give credit to the creators of the works that we incorporate into products that we call our own. Some examples of plagiarism:

- a sequence of words incorporated without quotation marks
- an unacknowledged passage paraphrased from another's work
- the use of ideas, sound recordings, computer data or images created by others as though it were one’s own
- submitting evaluations of group members’ work for an assigned group project which misrepresent the work that was performed by another group member
- altering or forging academic documents, including but not limited to admissions materials, academic records, grade reports, add/drop forms, course registration forms, etc.
- using language translation software.

For further information, students are encouraged to check NYU Policies and Guidelines on Academic Integrity (about/policies-guidelines-compliance/policies-and-guidelines/academic-integrity-for-students-at-nyu.html)

Disability Disclosure Statement

Academic accommodations are available for students with disabilities. Please contact the Moses Center for Students with Disabilities (212-998-4980 or mosescsd@nyu.edu) for further information. Students who are requesting academic accommodations are advised to reach out to the Moses Center as early as possible in the semester for assistance. For more information, see Study Away and Disability (nyu.edu/students/communities-and-groups/students-with-disabilities/study-away.html)

Instructor Biography

I am a serial entrepreneur currently working as Head of Customer Success at Graphext, where we disrupt multinational brands by implementing big data solutions. Previously, found and Chief Marketing Officer at Maintool, where we were making every watch smart. In my spare time I give advice and support to different startups in Spain. In addition, I own a bachelor’s degree in business administration at IE Business School and a Master in Big Data at IE School of Human Sciences and Technology.