

**Accounting**  
**Course Number: 22:010:604**  
**Course Title: Design & Development of Information Systems**

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**RECOMMENDED ONLINE RESOURCES AND ADDITIONAL READINGS**

- [PC Webopedia](#)
- [Wikipedia](#)

Course Canvas: For a student to gain access to our Canvas system, they must be enrolled and they must have a NETID. IEMBA students should ask for staff help in case of need or email us.

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**DOCUMENTATION OF PROBLEMS**

If you have a medical emergency or a *very serious* family or job problem, I will make every effort to accommodate your needs. In return, I request that you document your problem and submit this documentation for my review.

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**ACADEMIC INTEGRITY**

*I do NOT tolerate cheating.* Students are responsible for understanding the RU Academic Integrity Policy (<http://academicintegrity.rutgers.edu/>)

I will strongly enforce this Policy and pursue *all* violations. On all examinations and assignments, students must sign the RU Honor Pledge, which states, “On my honor, I have neither received nor given any unauthorized assistance on this examination or assignment.” I will screen all written assignments through *SafeAssign* or *Turnitin*, plagiarism detection services that compare the work against a large database of past work. Don’t let cheating destroy your hard-earned opportunity to learn. See [business.rutgers.edu/ai](http://business.rutgers.edu/ai) for more details.

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**CLASS PREPARATION**

This class will be conducted as a “flip class” where students prepare in advance and the class time is used for discussion. You must prepare the readings and try to cover some of the other materials in the folder. If you find other relevant readings you may want to share it with the class.

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## CLASS ASSIGNMENTS

*(Living in a dynamic world / Contributing to the community)*

There will be a series of assignments emerging from the discussions in class. Class participation is the MOST IMPORTANT variable in the final evaluation and students must be in class to participate, **cell phones must be closed, you should NOT be playing with your computer on other matters**, and the participants mind open and participative. Class participation in the digital area includes also sharing with the class references, readings and issues with your colleagues and the instructor.

Sending current topical matters for the list and reading what the others sent is a major components of the grade.

All assignments are due at the beginning of the class and should be e-mailed TO ME and (). Each student will make ONE presentation during the final project. The instructor must approve the topic and the group. Based on these topics the content of the classes will be changed. That is why the syllabus is called TENTATIVE.

The final exam will be performed from home but it will be strictly individual.

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## COURSE GRADING

<b>40%</b>	<b>Class participation</b>
<b>20%</b>	<b>Presentations</b>
<b>20%</b>	<b>Final project</b>
<b>20%</b>	<b>Final Exam</b>

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## ISSUE PRESENTATION

Each participant will choose, research, and present a discussion of one ISSUE relevant to this course. The issues on the syllabus are only suggestions. The group has wide latitude to choose but I have to approve the topic. Please e-mail me. Issues marked in blue will likely be presented by the instructor.

The group will have 15 minutes maximum to present including 3 minutes for questions. All members of the group should present.

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## FINAL PROJECT

We envisage this project being on the electronization (digitization) of a process or sub-process (e.g. continuous reporting, continuous audit, loans, treasury, financial analysis, xbrl, etc) but you have wide latitude to present a topic.

You should prepare a powerpoint deck with fully explanatory notes

**Also students will be assigned readings to make a short presentation max 10 minutes during the classes. Please email me if you have preferences.**

### COURSE SCHEDULE

	<b>Topic</b>	<b>Material (additional miscellaneous materials on Canvas) All slides will be shared during/after class (join.me)</b>
1	<b>Introduction / Predicting technology</b>	<p><b>Read:</b></p> <ol style="list-style-type: none"> <li>1. Disruptors disrupted, Economist, April 2015.</li> <li>2. Mary Meeker 2020</li> <li>3. Learning from disruptive startups</li> <li>4. The Secretive Company That Might End Privacy as We Know it.docx</li> </ol> <p><b>Issue:</b> The electronization/ digitization of education (try to find articles to read and send to our list)</p>

2	Artificial Intelligence / the singularity	<b>Read:</b> <ol style="list-style-type: none"> <li>1. The rise of the financial machines</li> <li>2. Scientists worry machines may outsmart man</li> <li>3. How smart is today's AI?</li> <li>4. How Tech Giants Are Devising Real Ethics for AI</li> <li>5. Teaching robots right from wrong</li> <li>6. Our Fear of Artificial Intelligence</li> <li>7. Artificial intelligence 2001 a disappointment</li> <li>8. Is big data taking us closer to deeper questions of AI?</li> <li>9. Machine learning: don't be an evil genius</li> <li>10. The ethics of AI <b>Issue:</b> Is AI similar to human intelligence?</li> </ol>
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3	Artificial Intelligence (2)	Examples from industries suggested by participants
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	GUEST: () on blockchain ( to be decided)	<ul style="list-style-type: none"> <li>• Please <b>send your brief (2 slides max) class presentations on where can u apply AI in your business to all Issue:</b></li> </ul>
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4	Robots – Drones - Internet of Things	<p><b>Read:</b></p> <ol style="list-style-type: none"> <li>1. Chips with everything</li> <li>2. IoT will bring the Internet’s business model</li> <li>3. Economist special report -&gt; it’s a smart world</li> <li>4. The Internet of Things (MCKinsey)</li> <li>5. How the IoT can change the value chain (HBR Dec. 2014)</li> <li>6. FTC concerns about IofT (NYT)</li> <li>7. If I had a hammer Friedman on robots <b>Issue:</b></li> </ol>
5	<p>Job Automation</p> <p>GUEST: () will discuss Robotic Process Automation and will instruct on using UIPath</p>	<p><b>Read:</b></p> <ol style="list-style-type: none"> <li>1. Economist – the future of jobs (Thanh)</li> <li>2. Eighty million jobs may be replaced by robots (Thanh)</li> <li>3. Four fundamentals of workplace automation (Thanh)</li> <li>4. Alles and Gray, Will the Medium Become the Message? A Framework for Understanding the Coming Automation of the Audit Process</li> <li>5. Frey and Osborne, The Future Of Employment: How Susceptible Are Jobs To Computerization?</li> <li>6. Understanding the impact of AI <b>Issue:</b></li> </ol>
6	Big Data	<p><b>Read:</b></p> <ol style="list-style-type: none"> <li>1. The forthcoming Data Ecosystems for Business Measurement and Assurance, JETA, 2020.</li> </ol>

		<ol style="list-style-type: none"> <li>2. The Economist Explains the backlash against big data</li> <li>3. Accounting's Big Data Problem</li> <li>4. Big Data Fades to the algorithm Economy. Gartner</li> <li>5. Alles &amp; Grey, Big Data in Accounting</li> <li>6. Explore algorithmic business <b>Issue:</b> Exogenous data that you can use in your business (prepare a page)</li> </ol>
7	<p>Corporate Surveillance and Government Economic Monitoring</p>	<p><b>Read:</b></p> <ol style="list-style-type: none"> <li>1. Brown-Liburd, Cheon, Vasarhelyi and Wang, Measuring with exogenous Data (MED) and Government Economic Monitoring (GEM)</li> <li>2. Vasarhelyi, Wang, &amp; Cheong Big Data Based Government Economic Monitoring and Targeted Action (GEM)</li> <li>3. They are watching you and everything</li> <li>4. San Francisco bans facial recognition</li> <li>5. Google know about you</li> <li>6. Google know more about me than I know about myself</li> <li>7. A world with a billion cameras</li> <li>8. Upending anonymity</li> <li>9. Tech for good</li> <li>10. Shoshana Zuboff, surveillance capitalism (book / video)</li> <li>11. The Bluedot Company</li> </ol>
8	<p>NSA Snooping, Security, cyberwar, privacy</p> <p>GUEST: () will discuss Cybersecurity and the Dark Web</p>	<p><b>Read:</b></p> <ol style="list-style-type: none"> <li>1. No Morsel Too Minuscule for all consuming NSA</li> <li>2. Court Upbraided NSA on Its Use of Call</li> </ol>

		<ul style="list-style-type: none"> <li>3. Is wikileaks hacking for secrets?</li> <li>4. A powerfull Rebuke of Mass Surveillance</li> <li>5. Thieves found Citigroup Site easy entry</li> </ul>
9	<p>Competing on analytics</p> <p>GUEST: () will discuss cyberrurrencies, and other issues</p>	
10	<b>Project Presentations</b>	
11	<p>Continuous Auditing/ Continuous Monitoring</p> <p>GUEST: () (will discuss Prefeitura do Rio de Janeiro)</p>	<p><b>Read:</b></p> <ul style="list-style-type: none"> <li>1. Upending Anonymity These Days</li> <li>2. Extramarital affairs may not have been secret</li> <li>3. Vasarhelyi – Principles of Analytic Monitoring</li> <li>4. FERF – the benefits of continuous monitoring</li> <li>5. Vasarhelyi et al Australian argument for Continuous Assurance</li> <li>6. Is the thief out of the barn? (slides) Hering and Brazilian Navy cases</li> </ul>
12	<b>Final Exam 2 (at home)</b>	<p><b>Open book, Internet and Notes.</b> <b>Closed other individuals</b></p>

**\*\* Tentative**

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## SUPPORT SERVICES

If you need accommodation for a *disability*, obtain a Letter of Accommodation from the Office of Disability Services. The Office of Disability Services at Rutgers, The State University of New Jersey, provides student-centered and student-inclusive programming in compliance with the Americans with

Disabilities Act of 1990, the Americans with Disabilities Act Amendments of 2008, Section 504 of the Rehabilitation Act of 1973, Section 508 of the Rehabilitation Act of 1998, and the New Jersey Law Against Discrimination. More information can be found at [ods.rutgers.edu](http://ods.rutgers.edu).

[Rutgers University-New Brunswick ODS phone (848)445-6800 or email [dsoffice@echo.rutgers.edu](mailto:dsoffice@echo.rutgers.edu)]

[Rutgers University-Newark ODS phone (973)353-5375 or email [ods@newark.rutgers.edu](mailto:ods@newark.rutgers.edu)]

If you are *pregnant*, the Office of Title IX and ADA Compliance is available to assist with any concerns or potential accommodations related to pregnancy.

[Rutgers University-New Brunswick Title IX Coordinator phone (848)932-8200 or email [jackie.moran@rutgers.edu](mailto:jackie.moran@rutgers.edu)]

[Rutgers University-Newark Office of Title IX and ADA Compliance phone (973)353-1906 or email [TitleIX@newark.rutgers.edu](mailto:TitleIX@newark.rutgers.edu)]

If you seek *religious accommodations*, the Office of the Dean of Students is available to verify absences for religious observance, as needed.

[Rutgers University-New Brunswick Dean of Students phone (848)932-2300 or email [deanofstudents@echo.rutgers.edu](mailto:deanofstudents@echo.rutgers.edu)]

[Rutgers University-Newark Dean of Students phone (973)353-5063 or email [DeanofStudents@newark.rutgers.edu](mailto:DeanofStudents@newark.rutgers.edu)]

If you have experienced any form of *gender or sex-based discrimination or harassment*, including sexual assault, sexual harassment, relationship violence, or stalking, the Office for Violence Prevention and Victim Assistance provides help and support. More information can be found at <http://vpva.rutgers.edu/>.

[Rutgers University-New Brunswick incident report link: <http://studentconduct.rutgers.edu/concern/>. You may contact the Office for Violence Prevention and Victim Assistance at (848)932-1181]

[Rutgers University-Newark incident report link: [https://cm.maxient.com/reportingform.php?RutgersUniv&layout\\_id=7](https://cm.maxient.com/reportingform.php?RutgersUniv&layout_id=7) . You may also contact the Office of Title IX and ADA Compliance at (973)353-1906 or email at [TitleIX@newark.rutgers.edu](mailto:TitleIX@newark.rutgers.edu). If you wish to speak with a staff member who is confidential and does **not** have a reporting responsibility, you may contact the Office for Violence Prevention and Victim Assistance at (973)353-1918 or email [run.vpva@rutgers.edu](mailto:run.vpva@rutgers.edu)]

If students who have experienced a temporary condition or injury that is adversely affecting their ability to fully participate, you should submit a request via <https://temporaryconditions.rutgers.edu> .

If you are a military **veteran** or are on active military duty, you can obtain support through the Office of Veteran and Military Programs and Services. <http://veterans.rutgers.edu/>

If you are in need of **mental health** services, please use our readily available services.

[Rutgers University-Newark Counseling Center: <http://counseling.newark.rutgers.edu/>]

[Rutgers Counseling and Psychological Services–New Brunswick: <http://rhscaps.rutgers.edu/>]

If you are in need of **physical health** services, please use our readily available services.

[Rutgers Health Services – Newark: <http://health.newark.rutgers.edu/>]

[Rutgers Health Services – New Brunswick: <http://health.rutgers.edu/>]

If you are in need of **legal** services, please use our readily available services: <http://rusls.rutgers.edu/>

Students experiencing difficulty in courses due to **English as a second language (ESL)** should contact the Program in American Language Studies for supports.

[Rutgers–Newark: [PALS@newark.rutgers.edu](mailto:PALS@newark.rutgers.edu)]

[Rutgers–New Brunswick: [eslpals@english.rutgers.edu](mailto:eslpals@english.rutgers.edu)]

If you are in need of additional **academic assistance**, please use our readily available services.

[Rutgers University-Newark Learning Center: <http://www.ncas.rutgers.edu/rlc>

[Rutgers University-Newark Writing Center: <http://www.ncas.rutgers.edu/writingcenter>]

[Rutgers University-New Brunswick Learning Center: <https://rlc.rutgers.edu/>]

[Optional items that many faculty include:

- Students must sign, date, and return a statement declaring that they understand the RU Academic Integrity Policy.

- Students must sign, date, and return a statement declaring that they understand this syllabus.]