

MGT 2210 Information Systems & Digital Transformation

Spring 2020 - Section B

Note: This course replaced MGT 2200 effective 2019 spring term.

Syllabus and Grading Rules version 3.0 - 3/25/2020

Course Instructor:

Marius Florin Niculescu, Ph.D. Associate Professor, IT Management

Office: Room 470 at CoB (4263 under 4-digit code) E-mail: marius.niculescu@scheller.gatech.edu

Instructor online office hours:

- Via BlueJeans (link to be provided)
- Schedule (subject to change)
 - Tue 2:30 pm 3:30 pm (afternoon)
 Thu 10:45 am 11:45 am (morning)
- Additional office hours might be added
- also by appointment (if students cannot make it to the above sessions)

Teaching assistant:

Ruigi ("Rich") Zhu

PhD Student, IT Management, Scheller CoB

Email: <u>rzhu74@gatech.edu</u>

Meng Xu

2nd year MBA student Email: mengxu@gatech.edu

TA office hours – <u>online</u> by appointment – only for the hands-on tools and methods (before assignment deadlines or before exams)

LECTURE TIMES & LOCATION: SECTION B

- Starting with Mar 30 Asynchronous Online
- Before Mar 12 9:30 am -10:45 am Tue, Thu Room 300, College of Business

COURSE RATIONALE:

Information and knowledge are now recognized as critical resources in the modern organization. Due to the dramatic progress of IT (e.g., computers, software, networks, mobile) over the last few decades, information systems now represent the central nervous system of most enterprises, and have become a crucial resource to ensure the competitive viability of almost any business. In fact, most organizations' value-creating strategies, products, and processes today entail significant reliance on information and information systems.

The purpose of this course is to introduce students to the foundations of the management, business value, and strategic importance of information resources and information technology, and provide them with the first steps towards becoming competent and IS-savvy managers.

COURSE OBJECTIVES:

The course assumes no information technology (IT) or information systems (IS) specific knowledge, and aims to build such a knowledge base through lectures, discussions, assignments, and readings. The specific goals and objectives are:

- 1. To define and analyze fundamental IT and IS concepts
- 2. To help students understand the strategic role of IS in the modern business enterprise.
- 3. To make students aware of current IS management issues and trends.
- 4. To introduce several data management, visualization, and analysis concepts / methods / hands-on tools
 - In MGT 2210 Section B Spring 2020 students will be introduced to <u>Excel, R, MySQL, and</u> Gephi

REQUIRED MATERIALS / TOOLS:

- Textbook (required digital version is the cheapest): Gallaugher, John (Dec 2019), <u>Information Systems</u>: A <u>Manager's Guide to Harnessing Technology</u>, Version 8.0, Flatworld Knowledge (ISBN 9781453397879)
 - Available in multiple formats. All are OK <u>but</u> some offer only online access, which makes it harder to access the readings without Internet connection. Regardless of circumstances around Internet connectivity, students are expected to complete the assigned readings on time. Thus, the <u>recommended</u> format is:
 - Online Access + Ebook download (access online, offline, eBook formats, chapter PDFs) – this is the cheapest option that also gives you access to the materials offline.
 - Link to purchase
 https://students.flatworldknowledge.com/course/2591410
- **Computer access** you will need <u>admin-level access to a computer</u> (preferably laptop so that you can bring it to class) to be able to install and utilize certain open source software tools (there is no cost associated with these software programs). Some of these tools <u>may not be available</u> in GT labs (physical or cloud).
- Smartphone / clicker / laptop you are required to submit answers to in-class questions via the TurningPoint system (the official clicker system supported by Georgia Tech). More information can be found at http://www.ctl.gatech.edu/it/clicker/student. You will need access to a smartphone, clicker, or laptop for polling purposes.
 - After 3/30/2020 we will no longer use TurningPoint.

<u>Note</u> – if students misuse electronic devices (in particular smartphones), the professor reserves the right to discontinue use of smartphones at any point during the semester and require students to purchase clickers. (no longer applies after 3/30/2020)

CLASS SESSIONS:

A mixture of lectures, discussions, assignments, and readings will be used to accomplish the course objectives. Class sessions will be interactive. Students are expected to contribute to class discussion with questions, comments, new perspectives, and their personal experience.

GRADING SCHEME:

The final course grade is broken down into the following components (and their respective weights):

1. **Team Assignments (285 points):** – **Nothing changed here**. There will be <u>6 team assignments</u> throughout the course. Each assignment will be handed out <u>a week before it is due</u> (so you have one week to solve it). All submissions must be in <u>electronic</u> form (via "<u>Canvas</u> – acceptable file formats will be communicated for each assignment). <u>Each document must contain all the names of the team</u> members. More instructions will be given along with the assignments.

In general, <u>no late submissions</u> will be accepted (exceptions <u>only</u> in cases of documented medical conditions or Institute approved events).

The <u>maximum</u> size of a team is of <u>2 students</u> (working alone is also permitted). Students have complete freedom to form the teams <u>but must inform the TA via email about the team composition</u> <u>within 24 hrs after EACH assignment was handed out</u> (one email per team is enough but you have to put <u>all</u> members of the team in the CC).

You may have different teams for different assignments.

Once a team is formed and reported to the TA, students cannot break it <u>without approval from the instructor</u> (but if there are conflicts between team members, students are encouraged to bring them to the attention of the instructor for resolution). Realize early if you work well as a team. I will not allow a team to be dissolved within the last 24 hrs. before the assignment is due (so make sure you touch base with each other in the first few days working on the assignment instead of leaving everything up to the last moment).

No collaboration is accepted among different teams (only within the team). Unauthorized collaboration is considered academic cheating and will result in penalties.

All members of the team will get the same grade, i.e. the one received on the team submission (for example, if the team submission gets a score of 45 points, then each member of the team gets 45 points for that respective assignment).

2. **Exams (565 points):** There will be 3 exams: two midterms (165 points each) and a final (235 points). The exams are designed to test your understanding of the material and the analytical skills developed throughout the semester. Each exam will cover exclusively approximately a third of the course (exams are **NOT CUMULATIVE** so the same material will NOT be tested in two exams). Note that exams cover also material tested by the home quizzes, readings, and assignments as long as it falls in the corresponding part of the course. Everything taught in class and important concepts from the assigned

readings are fair game (unless otherwise specified by the instructor). All exams are <u>closed book</u> and <u>closed notes</u>.

Makeup exams will not be given, unless mandated by Institute policy or otherwise specified by the instructor. You will be informed by the instructor if you need to bring calculators (you cannot use cell phones, smart watches, PDAs, tablets or laptops as calculators during exams).

Each question on an exam is worth 5 points.

The two midterms are given during regular lecture time and will last 65 mins each. The final is given during a period of 2 hours and 50 minutes. For that reason, the number of questions on the final exam will be greater than that in the midterms and the weight of the final is slightly higher.

You can check your final exam date and time at http://www.registrar.gatech.edu/students/exams.php

Update about the final exam – the final will be administered online – more details to follow.

3. Class Participation - CP (104 points): Some changes after 3/30/2020

Before 3/13/2020 (64 pts)

You are expected to attend class regularly and to actively participate. Class participation (CP) will be evaluated through <u>daily</u> CP questions (with a few exceptions) administered via the TurningPoint system (you can submit these answers either using your smartphone / laptop and the TurningPoint app — which is free - OR using a TurningPoint clicker that you will need to purchase individually). Thus, <u>bring your smartphone OR clicker to each lecture</u>. A few multiple choice questions will be interspersed throughout each class session (most lectures will contain 1-3 CP questions).

For each CP question, you get:

- 2 points if the answer is correct
- 1 point if the answer is wrong partial credit
 - This in a sense accounts for (i) attendance and (ii) the fact that there is still learning taking place when an answer is wrong but the right answer is discussed in class
- 0 points if you do not answer (or you are absent)

If you are in class, it is always better to answer than not to answer.

There are <u>no CP points for the first two lectures</u> (first week) – we will demo the polling system (TurningPoint) on 1/9/2020 but those points will not count towards your class participation score

Very important!!! Answers to CP questions that are <u>NOT submitted electronically via the Turning</u> <u>Point system</u> <u>may not receive any credit</u>. The instructor will not manage answers submitted on pieces of paper.

After 3/30/2020 (40 pts)

Given that all instruction is moving online and we are using an asynchronous approach for the remainder of the semester, it is not possible to use TurningPoint. For the remainder of the semester,

the class participation questions will be administered as <u>quizzes in Canvas after the respective lecture</u>. These are different from the reading-based quizzes with answers due before lecture.

- You will have <u>36 hours after the regular meeting time of the lecture</u> (i.e., after 10:45 am on Tue and Thu) to take and complete the quiz for that lecture. Note that all pre-recorded lectures and all files for each respective lecture will be posted prior to each lecture time (prior to 9:30 am on Tue and Thu).
 - The 36-hour deadline for lecture-based quizzes ensures that you keep up with the material in a timely fashion
- These quizzes will be timed (you will have only a few minutes for each question to be announced before each quiz). Once you start the quiz (whenever you choose within that 36 hour window), the timer will start and you will need to answer all questions within the set time. After that, you will no longer be allowed to submit answers.
- Same grading applies as before:
 - 2 points if the answer is correct
 - 1 point if the answer is wrong partial credit
 - O points if you do not answer (or you do not take the quiz at all)

Note:

On 4/21/2020, we have the last instructional day. For that lecture, if there are any CP questions afterwards (in the form of a quiz), as long as you submit any answers, you get maximum points. That quiz will be more to help you review the material.

BUFFER POINTS - This has changed

The class participation points add up to 104. There will be a buffer of up to 12 points which will be added to your score ONLY up to 104 (you cannot have more than the maximum CP score).

- For example:
 - if your final CP score is 102, you get only 2 buffer points for a total score of 104.
 - If your final CP score is 97, you get only 7 buffer points for a total score of 104
 - If your final CP score is 81, you get all 12 points for a total score of 93
- 4. Reading-based Questions (RQ) Reading-based questions with answers due before lecture (46 points) Nothing changed here

Before some of the classes with assigned readings, there will be several (one or more) questions posted online with answers <u>due before lecture</u> (electronic submission closes before lecture and there will be no late submissions accepted). In total there will be 24 such questions. They will be administered via Canvas system.

For each these questions, you get:

- 2 points if the answer is correct
- O points if the answer is wrong / missing

For reading-based questions there is **NO** partial credit for wrong answers.

5. Extra credit (up to 30 points): — Nothing changed here Details to be announced in class.

FINAL GRADE – SUMMARY OF COMPONENT BREAKDOWN:

	Max points
HW – 6 Team Assignments	285
Midterm Exam 1	165
Midterm Exam 2	165
Final Exam	235
Class Participation	104
 before 3/13/2020 – 64 pts 	
 after 3/30/2020 – 40 pts 	
Reading-based Questions	46
 before 3/13/2020 – 28 pts 	
 after 3/30/2020 – 18 pts 	
<u>Total</u>	1000

Extra-credit – up to 30 points (added to the final score only up to a total of 1000 pts)

FINAL GRADE COMPUTATION:

Conversion of Final Point Score to Letter Grade:

Rounding: Final point score will be adjusted to the closest integer percent. For example, 89.6% (or 896 points) = 90% while 89.4% (or 894 points) = 89%.

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A = 895 pts - 1000 pts
B = 795 pts - 894 pts
C = 695 pts - 794 pts
D = 595 pts - 694 pts
F = 0 pts - 594 pts
(above 90% with rounding)
(80-89% with rounding)
(70-79% with rounding)
(60-69% with rounding)
(0-59% with rounding)
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Students taking this course on a <u>pass/fail</u> basis will be assigned an "S" for their performance only if they would have received the grade of "C" or better (i.e., above 70% with rounding or, equivalently, above 695 points) had they enrolled in the course on a regular letter-grade basis.

Posted Letter grades are <u>FINAL</u>. Unfortunately, there will always be a significant number of students that end up missing a higher grade by a few points. No matter where I draw the line, this will occur. Therefore, I am not able to make arbitrary adjustments once all the scores are in without undermining the whole grading system.

ACADEMIC HONESTY AND STUDENT RIGHTS:

This course will follow the guidelines established by Georgia Tech's honor code and student handbook. All sources of information quoted in any of the course assignments are to be appropriately acknowledged.

Please keep in mind that academic dishonesty includes (a) cheating, (b) fabrication and falsifications, (c) multiple submissions, (d) plagiarism, and (e) complicity in academy dishonesty. Students will be asked to acknowledge their acceptance of this stipulation and their willingness to abide by all terms of the Honor Code by signing a copy of the "Honor Agreement" attached to all exams (for midterms 1 and 2). In addition, students will be required to confirm their commitment to abide by the honor code in electronic form for the online final exam. The complete text of the Honor Code can be found at http://osi.gatech.edu/content/honor-code. Additional information can also be found at http://www.honor.gatech.edu/.

COMMUNICATIONS / CHANGES TO SYLLABUS:

The above procedures for grading and the class schedule that follows are <u>subject to change</u>. Any changes (with sufficient time for students to make necessary adjustment) will be posted on the shared class website in Canvas (http://canvas.gatech.edu/). This website will be also used to distribute assignments, grades, lecture notes, announcements. It is the students' responsibility to check the website *before* each class session.

Communication will also be based on the Georgia Tech student email (that ends in @gatech.edu) that is assigned to you. We pull that address automatically from the school database. It is your responsibility to have the Georgia Tech email account active and to receive and regularly read messages written to that address. If you have a personal address (like Gmail or Yahoo), forward your Georgia Tech email to that address and make sure it is not filtered as spam.

CLASSROOM CONDUCT:

Prior to 3/13/2020

- Arrive to class on time.
- If you enter the classroom after the start of the lecture, <u>always use the back entrance</u>.
- Bring the clicker or smartphone to every lecture
- Do not talk to your classmates during the class time.
- Usage of any digital devices <u>outside of polling for class participation</u> is <u>prohibited</u> during the class time unless otherwise explicitly specified by the instructor (use of laptops will be permitted during the lectures that involve hands-on tools such as Excel, R, MySQL or Gephi).
- When you want to engage in a class discussion, raise your hand and wait to be called by the instructor.

Additional pertinent information regarding student conduct can be found at http://www.catalog.gatech.edu/rules/19/#scc

Important!!! – <u>Disruptive behavior during lecture</u> may lead to the student being dismissed from the classroom and with all class participation points lost for that respective lecture. Additional penalties in accordance with Georgia Tech regulations may be imposed depending on the severity of the disruption.

<u>After 3/30/2020</u> – since the lectures will be delivered in asynchronous way, many of the above rules do not apply any longer for the remainder of the semester. However, you are required to be respectful of others and follow appropriate conduct during <u>live online</u> office hours via BlueJeans.

TENTATIVE SCHEDULE (updated with changes after 3/30/2020)

No.	DAY	DATE	TOPIC	READINGS/TASKS <u>BEFORE</u>	Test / HW
				CLASS	
1	Tue	1/7	Course intro	Optional: Gallaugher	
	T1	4 /0	Trends and information systems overview	Ch. 1.1-3	
2	Thu	1/9	Organizational information systems	Gallaugher Ch. 13.3-4, 13.6	
3	Tue	1/14	Intro to Excel - #1		
4	Thu	1/16	Intro to Excel - #2		
5	Tue	1/21	Intro to Excel - #3		
	T1	4 /22	Value Creation and Appropriation Framework - #1		104/4
6	Thu	1/23	Value Creation and Appropriation Framework - #2 Netflix - #1	Gallaugher Ch. 4	HW1 Excel #1 due
7	Tue	1/28	Netflix - #2	Gallaugher Ch. 2, Ch. 4	
			Value creation with IS	_	
			Using IT/IS to achieve sustainable competitive		
			advantage		
8	Thu	1/30	Google - Online Search and Online Advertising	Gallaugher Ch. 18.1-9	HW2 Excel #2 due
9	Tue	2/4	Zara	Gallaugher Ch. 3	
		-, .	Midterm 1 Review	and a second	
10	Thu	2/6	MIDTERM 1		
11	Tue	2/11	Business Intelligence / Analytics - #1	Gallaugher 15.3-7	
			- '	Install R and RStudio	
				(installation links and	
				instructions to be provided)	
12	Thu	2/13	Business Intelligence / Analytics - #2		
13	Tue	2/18	Business Intelligence / Analytics - #3		
14	Thu	2/20	The Internet - #1	Gallaugher Ch. 16.1-3	HW3
		_,		amanagarar am zarz a	BA #1
					(using R)
					due
15	Tue	2/25	The Internet - #2	Gallaugher Ch. 8	
		•	Network and platform economics - #1		
16	Thu	2/27	Network and platform economics - #2	Gallaugher Ch. 8	HW4
		•	· ·		BA #2
					(using R)
					due
17	Tue	3/3	Crowdsourcing and the Sharing Economy	Gallaugher Ch. 9.6-7, Ch. 10	
18	Thu	3/5	Moore's Law, E-waste, Sustainable IT	Gallaugher Ch. 5.1-4	
			Midterm 2 Review		
19	Tue	3/10	MIDTERM 2		
20	Thu	3/12	TBA		

3/16/2020 - 3/20/2020 - Spring Break - No classes

	Due to COVID-19, all instruction is moved online after the spring break							
	3/23/2020 – 3/27/2020 – Week of practice session(s) for online education tools and methods							
21	Tue	3/31	Intro to Relational Databases and SQL - #1	Gallaugher 15.2 Install XAMPP (installation links and instructions to be provided)				
22	Thu	4/1	Intro to Relational Databases and SQL - #2					
23	Tue	4/7	Intro to Relational Databases and SQL - #3 Social Networks and the Social Graph - #1	Gallaugher Ch. 9.4-5, 9.8, Ch. 11				
24	Thu	4/9	Social Networks and the Social Graph - #2	Install Gephi (installation links and instructions to be provided) Gallaugher Ch. 9.4-5, 9.8				
Ch. 11 HW 5 – Database querying (using <i>MySQL</i>) – tentatively due Sun, 4/12/2020								
25	Tue	4/14	Emerging technologies - Blockchain	Gallaugher Ch. 6				
26	Thu	4/16	Open Source Software & Hardware, IT Security - #1	Gallaugher Ch. 14.1-5, Ch. 17				
HW 6 – Social Network Analysis (using <i>Gephi</i>) – tentatively due Sun, 4/19/2020								
27	Tue	4/21	IT Security - #2, Privacy	Gallaugher Ch. 11.5, Ch. 15.8, Ch.17				
	Thu	4/30	FINAL EXAM TBA – online, roughly around Apr. 30					
			(it was originally scheduled on 4/30 at 11:20 am – 2:10 pm)					