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## BMIS 372.00: Information Infrastructures

Patricia Akello *University of Montana, Missoula*, patricia.akello@umontana.edu

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# BMIS 372 Information Infrastructures Fall 2022



#### **Instructor Information**

Professor: Dr. Patricia Akello

E-mail: <u>patricia.akello@mso.umt.edu</u>

Office Hours: 10:00 – 10:45 pm T, Th or virtually by appt.

### **Course Information**

Meeting Place: GBB L11

Meeting Time: 2:00 – 3:20 T, Th Sec 1

3:30 – 4:50 T, Th Sec 2

This course is a 3-credit hour, full-semester offering that explores the evolution of technological infrastructures with an emphasis on strategic implications. Students will develop an enterprise infrastructure and then examine innovations that allow for the design and development of products and services in a global business environment.

Prereq: Junior standing in business

### **Textbook**

No textbook. All materials will be posted to Moodle.

#### **Grading Evaluation**

Criterion	Weight
Exam 1	20%
Exam 2	20%
Content Discussions	15%
Hype Cycle Presentations	10%
Salesforce Trailmix	10%
Salesforce Project	25%

Letter grades will be based on the following scale:

A 93% and above

A- 90% to 92.9%

B+ 87% to 89.9%

B 83% to 86.9%

B-80% to 82.9% C+77% to 79.9% C 73% to 76.9% C-70% to 72.9% D+ 67% to 69.9% D 63% to 66.9% D-60% to 62.9% F Below 60%

## **Expected Learning Objectives and Assessment**

Students will:

- 1. Appreciate the profound role technology is playing in business and society.
- 2. Understand basic concepts around technical architectures including common operating environments and the cloud.
- 3. Distinguish between proprietary and infrastructural technologies.
- 4. Distinguish between sustaining and disruptive innovations.
- 4. Appreciate how entrepreneurs are leveraging technology to disrupt established markets.
- 5. Understand the challenges managers face in protecting and securing information systems.
- 6. Identify business challenges and creatively apply technology to solve problems.
- 7. Experiment with diverse technologies.

## **Assignments**

#### **Exams**

The exams will be a combination of multiple choice, short answer, and essay questions covering the content discussed in class and readings from Moodle. No makeup exams will be allowed if the absence is not pre-approved. Missing an exam without pre-approval results in a zero.

#### **Content Discussions**

Each group (assigned by the instructor) will be assigned a block of content. During a class period, the group will present the content in a guided discussion-based format. Instructions and examples will be provided in class.

## **Hype Cycle for Emerging Technologies Presentations**

Gartner, Inc. is a world-renown information technology research and advisory firm. Each year Gartner releases an assessment of the maturity, business benefit and future direction of more than 2,000 technologies, grouped in 119 areas. This report, known as the hype cycle report, provides a cross-industry perspective on the technologies and trends that business strategists, chief innovation officers, R&D leaders, entrepreneurs, global market developers and emerging technology teams should consider in developing emerging-technology portfolios.

In this assignment, each pair of students (drawn randomly at the beginning of the semester) will choose one technology from the hype cycle and present this technology to the class. Detailed instructions are given on Moodle.

#### **Salesforce Trailmix**

A series of fifteen Salesforce Trailheads (free online training modules) will be assigned throughout the semester. These are individual assignments.

## **Salesforce Project**

There will be a Salesforce project assigned which will utilize the material and technologies covered in class and the trailmix. The project will be completed in cross-disciplinary teams assigned by the instructor (same group as the content discussions). Each group will present their project to the class which will include fellow students, select ATG/Cognizant employees, and Salesforce leaders. The presentations will be held during the evening of 12/6 (Sec 1) and 12/7 (Sec 2) from 5:00 – 9:00 pm. **These sessions are mandatory.** 

#### **Policies**

## **Academic Honesty**

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. The University of Montana Student Conduct Code specifies definitions and adjudication processes for academic misconduct and states, "Students at the University of Montana are expected to practice academic honesty at all times." (Section V.A., available at http://www.umt.edu/vpsa/policies/student\_conduct.php). All students need to be familiar with the

Student Conduct Code. It is the student's responsibility to be familiar the Student Conduct Code. <u>SoBA Professional Conduct</u>. (link:

http://www.business.umt.edu/Soba/SoBAEthics/CodeofProfessionalConduct.aspx)

## **Disability Services for Students**

The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students. If you think you may have a disability adversely affecting your academic performance, and you have not already registered with Disability Services, please contact Disability Services in Lommasson Center 154 or 406.243.2243. I will work with you and Disability Services to provide an appropriate modification.

## Mission Statements and Assurance of Learning

The College of Business at the University of Montana creates transformative, integrated, and student-centric learning experiences, propelling our students to make immediate and sustained impact on business and society. We nurture our students' innate work ethic to develop confident problem solvers and ethical decision makers. We pursue thought leadership and collectively create opportunities for a better life for our students, faculty, and staff.

#### **COB Core Values:**

- Students first: We educate the whole person
- Experiential learning: We create experiences that matter
- Thought leadership: We create rigorous and relevant knowledge
- Stewardship: We value people, planet and profit

Learning Goals: As part of our assessment process and assurance-of-learning standards, the COB has adopted the following learning goals for our undergraduate students:

Learning Goal 1: COB graduates will possess fundamental business knowledge in the core disciplines of Accounting, Finance, Management Information Systems, Management and Marketing.

Learning Goal 2: COB graduates will be able to integrate business knowledge.

Learning Goal 3: COB graduates will be effective communicators.

Learning Goal 4: COB graduates will possess problem-solving skills.

#### Covid Protocols (for the foreseeable future)

- Mask use is mandatory within the classroom. If you feel unsafe, please
- If you feel sick and/or are exhibiting COVID-19 symptoms, please don't come to class and contact the Curry Health Center at (406) 243-4330.
- If you are required to isolate or quarantine, you will receive support in the class to ensure continued academic progress. (Lectures will be posted to Moodle after the class session has ended).
- UM recommends students get the COVID-19 vaccine. Please direct your questions or concerns about vaccines to Curry Health Center.
- Where social distancing (maintaining consistent 6 feet between individuals) is not possible, specific seating arrangements will be used to support contact tracing efforts.
- Class attendance and seating will be recorded to support contact tracing efforts.
- Drinking liquids and eating food is discouraged within the classroom.
- Please note this class may be recorded.

# Schedule and Assignments

Date	Topic	Assignments and/or Readings Due	Trailhead Due	Content Discussion	Hype Cycle Presentation
8/30	Introduction/ Syllabus				
9/1	Infrastructure and Society	1. What is Infrastructure (only read pages 3 – 6) 2. 12 Types of Information Infrastructure 3. Leading the data economy 4. Blockchain and Data Exchanges for Smart Cities			
9/6	Infrastructure 101	1. MIS Infrastructure Baltzan	Salesforce Career Exploration	None	Pair A
9/8	Infrastructure 101 - Sustainability	<ol> <li>Infrastructure</li> <li>Sustainability Baltzan</li> <li>Sustainable-IT</li> <li>Report (just read exec summary).</li> </ol>	Career Development Planning Basics	Group 1	Pair B
9/13	Current Events	4 articles	Public Speaking Skills	Group 2	Pair C
9/15	Internet 101	TB1: 12.1 – 12.4	Salesforce Platform Basics	Group 3	Pairs D & E
9/20	Internet 101	<ul><li>1. Web Servers</li><li>2. The Internet of Things</li></ul>	Salesforce CRM	Group 4	Pairs F & G
9/22	Security & Privacy	TB1: 13.1 – 13.4	Leads & Opportunities	Group 5	Pairs H & I
9/27	Security & Privacy	<ol> <li>Common Cyber</li> <li>Security Threats</li> <li>Controlling our data</li> </ol>	Account & Contacts	Group 6	Pairs J & K
9/29	Exam 1		Data Modeling		
10/4	Enterprise Architecture	Links 3a – 3d	Data Management	Group 7	Pairs L & M

10/6	Enterprise Architecture	1. OSI Model 2. OSI vs TCP/IP 3. Blockchain and OSI	Lightening Experience	Group 8	Pairs N & O
10/11	Cloud Computing	Cloud and OSI     Cloud Computing	Salesforce Mobile	Group 9	Pairs P & Q
10/13	Guest Lecture		Chatter		Pairs R & S
10/18	APIs	<ol> <li>What is an API?</li> <li>More on APIs</li> </ol>	Formulas & Validations	Group 10	Pair T
10/20	Problem Solving	1. Design Thinking Process	Quick Start: Process Builder		
10/25	Exam 2		Flow Basics		
10/27	UM's Data Center tour		Einstein Basics		
11/1	Monetization Ecosystem		Sales Cloud Einstein		
11/3	Introduction to Final Project				
11/8	Working session - Salesforce Project				
11/10	Mandatory Class - Salesforce Project	Project Status Update			
11/15	Working session - Salesforce				
	Project				
	Remote				
	office hours				
	with ATG				
11/17	Working session -				
	Salesforce				
	Project				
	Remote				
	office hours				
	with ATG				

11/22	Working
	session -
	Salesforce
	Project
11/24	No class -
	Thanksgiving
11/29	Working
	session -
	Salesforce
	Project
	Remote
	office hours
	with ATG
12/1	

Monday, 12/5 5:00 – 9:00 pm Sec 1 Tuesday, 12/6 5:00 – 9:00 pm Sec 2

TB1: Information Systems: A Manager's Guide to Harnessing Technology. On Moodle and also, <a href="https://biz.libretexts.org/Bookshelves/Management/Book%3A">https://biz.libretexts.org/Bookshelves/Management/Book%3A</a> Information Systems - A Manager's Guide to Harnessing Technology

### All Links are on Moodle

I will announce all changes to the schedule in class and on Moodle.