

DSO 531 – Digital Foundations for Business Innovation

**Syllabus – Spring 2022 – 6 weekly meetings, Thursdays,
2:00pm - 4:50pm – 1.5 Units**

Professor: Inge Lindholm
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Office Hours: On request

NOTE: The first class will be held March 10, 2022 and begins during the second half of the semester.

Course Description:

Every business has become, or is transitioning into, a digital business. Consumers today live in a world where the most valuable retailer has no inventory, the world's most popular media owner creates no content, the world's largest accommodation provider owns no real estate and the world's largest taxi company owns no vehicles. But the forces shaping this digital revolution are often difficult to understand, for both these consumers and many business leaders. This course will largely be based on discussion and require students' active participation in every session.

The course examines over a dozen emerging digital innovations shaping consumer-oriented businesses, in order to provide a basic framework for these concepts and provide leaders a greater understanding of how to leverage these powerful capabilities to build or grow businesses.

For each of these digital innovations and in each class session, the course is focused on five questions:

What does it mean?

Why is it an important trend?

What is the landscape?

What are the key metrics?

What are the implications for users, organizations and business leaders?

Beyond knowledge gleaned from classroom teaching and insights shared from today's business world, students will put their knowledge to work, developing two individual written submissions regarding specific digital innovations, and a group business plan based on one or more of these digital innovations.

Learning Objectives:

1. Course participants will demonstrate fluency in the language framework of digital as a tool for business innovation, via creation of written material and presentations.

2. Course participants will engage in dialogue with one another and with executive guest speakers regarding how emerging digital tools and technologies of our time can provide opportunities for business leaders, along with potential drawbacks to be safeguarded against.
3. Students will infuse perspectives from thought leaders and business executives working to address real-world business needs into their written work.
4. Students will build a business case based on digital innovation, enhancing written, verbal communication and teamwork skills.

Required Materials:

Each week, prior to class, course content will be sent to students for the topics to be covered in class that week. Please see the “Course Calendar/Readings/Class Sessions” for further details on these assigned reading materials. There are no other materials that you need to purchase.

Prerequisites and/or Recommended Preparation:

No prerequisites. Assigned readings will consist of:

- Why Software Is Eating The World, Marc Andreessen
(<http://www.wsj.com/articles/SB10001424053111903480904576512250915629460>)
- Startup Growth, Paul Graham (<http://www.paulgraham.com/growth.html>)
- Course participants will be asked to read current events and case studies selected by the instructor to help enhance the learning outcomes of the course.
- Students may also find the following readings to be beneficial – these readings are *not* required, but presented as ways for students’ personal development and to deepen their understanding:
 - MIT Technology Review (<https://www.technologyreview.com/>)
 - McKinsey & Company Business Technology
(<http://www.mckinsey.com/business-functions/business-technology/our-insights>)
 - Techcrunch (<https://techcrunch.com/>)
 - Who Says Elephants Can’t Dance, Louis V. Gerstner
 - Zero to One, Peter Thiel
 - The Innovators, Walter Isaacson
 - The Everything Store, Brad Stone
 - How To Create A Mind, Ray Kurzweil
 - The Innovator’s Dilemma, Clayton Christensen
 - Countdown to Zero Day, Kim Zetter
 - Losing The Signal, Jacquie McNish and Sean Silcoff
 - The Intel Trinity, Michael Malone
 - Our Final Invention, James Barrat

Course Schedule:

The course schedule will be as follows (order and/or topics subject to change):

WEEK 1	Introduction & Key Drivers; Cybersecurity
WEEK 2	Cloud Computing; Post-Screen Usability
WEEK 3	Digital Currency & Payments, Messaging & Social Commerce
WEEK 4	Big Data, Autonomous Vehicles
WEEK 5	Physical-Digital Convergence; Internet of Things
WEEK 6	Artificial Intelligence

The final project presentations will be determined by the university policy's scheduled time and date during the final exam period and will be communicated to the class upon confirmation.

Course Notes:

This course meets for six sessions, with each session consisting of a lecture-style briefing regarding specific digital innovations, with various subject matter experts currently working in the digital realms as available, followed by ample time for Q&A and open discussion around the five key questions examined in the briefing and future implications for users, organizations, and business leaders. A seventh session will meet for final project presentations.

Assignments and Grading Detail:

The key deliverables for course grading will be an **(1) individual analysis memo, an (2) individual paper, a (3) project proposal, (4) a written group presentation report, a (5) live group presentation, & (6) peer feedback. Participants will also receive an (7) overall participation grade for the course.**

Your course grade will be based on the following individual and group assignments:

<u>ASSIGNMENTS:</u>	<u>GRADE:</u>
(1) Analysis Memo	15%
(2) Individual Paper	30%
(3) Proposal	5%
(4) Written Team Presentation Report	15%
(5) Live Presentation	15%
(6) Peer Evaluation	5%
(7) Overall Participation	15%

TOTAL	100%
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(1) Individual analysis memo (15% of total course grade), due in week 2, is to be composed individually and examine the application of an emerging digital tool or technology by a traditionally non-digital company. Students should select a company that leveraged one digital tool or technology. Some examples may include:

- Big Data
- Cloud Computing
- Cybersecurity
- Artificial Intelligence
- AR/VR
- Digital Currency & Payments
- Internet of Things

The memo, which should be no longer than 2 pages, should take the form of an executive summary and cover the following questions:

- What was the business need the company was looking to address through the employment/application of digital tools and technologies?
- How successful was the company in addressing this need?
- What alternatives could the company have considered?
- What future opportunities are now possible for the company following the implementation of this digital tool or technology?
- What threats or considerations are posed to the company because of the implementation of this digital tool or technology that did not exist before?

(2) The individual paper (30% of total course grade), due in week 4, is a deeper dive into a specific question of relevance for a digital topic. The objective of the paper is to provide a well-constructed summary of how Digital is disrupting your selected industry, either the overall industry or a sub-sector of the industry. Course participants will select an industry sector of interest. Some examples include:

- Healthcare & Pharmaceuticals
- Financial Services
- Automobiles – Manufacturing, Leasing, and Ride-Hailing
- Government (Federal, State or Local)
- Retail
- Gaming

In the paper, students are expected to go deep into the subject matter, taking a perspective and defending it through critical thinking and analysis.

The questions each paper should answer are:

- How are you defining / scoping the industry? Are you focusing your paper on a specific subset of the industry?
- What are the specific 3-4 trends and/or digital innovations that are currently disrupting this industry? How are these trends impacting incumbent companies and their business models?
- Who are the winners & losers with respect to market share, growth, and market power?
- Each paper, not to exceed 6 pages (5 pages for content/exhibits, 1 page for citations), is expected to refer to relevant sources in academic or popular media and cite appropriately.

(3) (4) (5) (6) The group project, the business case, requires working in self-organized teams of 5-6 to develop a plan for a company or organization to take advantage of one (or more) of the digital innovations discussed in class. You can take the position of a company currently in existence or create a business plan for a new company.

The deliverables are grouped into four categories:

(3) Proposal (5% of total course grade):

- A project proposal, in the form of an executive summary, not exceeding one page, is to be submitted in week 5. This describes the team's project thesis and what problem they intend to solve by leveraging digital innovations.

(4) Written group presentation report (15% of total course grade):

- A written report submitted by the team to complement their presentation. The report should include all citations, sources, exhibits, etc. The report should be submitted in PDF form.

(5) Live Presentation: (15% of total course grade):

- A live presentation, not exceeding 15 minutes including Q&A, delivered as a group to a panel of business leaders. These judges' feedback will be incorporated into your project's grade.
- This will take place during the final examination period and. will be presentations will be conducted live. Pre-recordings of the individuals presenting, or entire teams' presentation will not be accepted.
- Each student will be required to present, and the team will be evaluated as a part of this grade.

(6) Peer evaluation (5% of total course grade):

- Based on teamwork, combined effort, thoughtful consideration of each team member's perspective and individual contribution to project. This will be submitted immediately following your live presentation.

(7) Overall Participation (15% of total course grade):

- Class participation is an important component of this course. Participants will be challenged to think critically about the technologies being discussed and consider the implications in business and everyday life.
- Participants are encouraged to think about how to effectively contribute to the class and should be prepared to actively contribute to the class discussion, asking thoughtful questions and contributing value-adding insights that advance the conversation.
- It is important to recognize the quality of contributions is much more important than the quantity of contributions.
- Attendance will be noted during each session and will be factored.

Grading Policies:

Students' success in this course will depend on their critical thinking, problem-solving and collaboration skills. They will be asked to thoughtfully consider concepts shared in class, trends identified in the course materials, personal experiences and emerging innovations to develop clear business plans and original perspectives. Students will be exposed to questions faced by global businesses and will be asked to examine both positive implications from emerging digital innovations as well as potential drawbacks, with the goal of developing business plans that are beneficial to customers, employees and companies as well as communities.

Written work on the analysis memo, group paper and printed elements of the business case will be evaluated based on how thoroughly the topic is examined and the actionable insights provided. For the presentation, students will be evaluated on how effectively they demonstrate the viability and potential impact of their plan, as well as their professional delivery of the presentation itself.

Assignment Submission Policy:

Assignments must be turned in on the due date/time electronically via Blackboard. Any assignment turned in late, even if by only a few minutes, will receive a grade deduction (for example, if your work is a B+ grade, you will be given a C+ grade).

If your Internet breaks down on the due date, you must deliver a hard copy at the beginning of class on that day. If you are unable to attend class on that day, make arrangements for it to be delivered to the classroom or to my box by the start of class. Late or not, however, you must complete all required assignments to pass this course.

Retention of Graded Coursework:

All graded work which affected the course grade will be retained for one year after the end of the course *if* the graded work has not been returned to the student (i.e., if I returned a graded paper to you, it is your responsibility to file it).

Technology Policy:

Example: Laptop and Internet usage is not permitted during academic or professional sessions unless otherwise stated by the respective professor and/or staff. Use of other personal communication devices, such as cell phones, is considered unprofessional and is not permitted during academic or professional sessions. ANY electronic devices must be completely turned off during class time. Upon request, you must comply and put your device on the table in off mode and FACE DOWN. You might also be asked to deposit your devices in a designated area in the classroom. Videotaping faculty lectures is not permitted due to copyright infringement regulations. Audiotaping may be permitted if approved by the professor. Use of any recorded or distributed material is reserved exclusively for the USC students registered in this class.

STATEMENT ON ACADEMIC CONDUCT AND SUPPORT SYSTEMS

Academic Conduct:

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Part B, Section 11, “Behavior Violating University Standards” policy.usc.edu/scampuspartb. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, <http://policy.usc.edu/scientific-> misconduct.

Students with Disabilities:

USC is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. If you have a disability which may impact your performance, attendance, or grades in this course and require accommodations, you must first register with the Office of Disability Services and Programs (www.usc.edu/disability). DSP provides certification for students with disabilities and helps arrange the relevant accommodations. Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to your TA) as early in the semester as possible. DSP is located in GFS (Grace Ford Salvatori Hall) 120 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776. Email: ability@usc.edu.

Support Systems:

Student Counseling Services (SCS) - (213) 740-7711 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. <https://engemannshc.usc.edu/counseling/>

National Suicide Prevention Lifeline - 1-800-273-8255

Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. <http://www.suicidepreventionlifeline.org>

Relationship & Sexual Violence Prevention Services (RSVP) - (213) 740-4900 - 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

<https://engemannshc.usc.edu/rsvp/>

Sexual Assault Resource Center

For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: <http://sarc.usc.edu/>

Office of Equity and Diversity (OED)/Title IX compliance – (213) 740-5086

Works with faculty, staff, visitors, applicants, and students around issues of protected class.

<https://equity.usc.edu/>

Bias Assessment Response and Support

Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response. <https://studentaffairs.usc.edu/bias-assessment-response-support/>

Student Support & Advocacy – (213) 821-4710

Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. <https://studentaffairs.usc.edu/ssa/>

Diversity at USC – <https://diversity.usc.edu/>

Tabs for Events, Programs and Training, Task Force (including representatives for each school), Chronology, Participate, Resources for Students

USC Emergency Information

Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible. emergency.usc.edu

USC Department of Public Safety – UPC: (213) 740-4321 – HSC: (323) 442-1000 – 24-hour emergency or to report a crime.

Provides overall safety to the USC community. dps.usc.edu

Emergency Preparedness/Course Continuity:

In case of a declared emergency if travel to campus is not feasible, the *USC Emergency Information* web site (<http://emergency.usc.edu/>) will provide safety and other information, including electronic means by which instructors will conduct class using a combination of Blackboard, tele-conferencing, and other technologies.

If you use Blackboard regularly . . .

Please make sure you can access this course in Blackboard and retrieve the course syllabus and other course materials electronically. You should check Blackboard regularly for announcements and new materials. In the event of an emergency, the ability to access Blackboard will be crucial. USC's Blackboard learning management system and support information is available at blackboard.usc.edu.

Academic Conduct:

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Part B, Section 11, “Behavior Violating University Standards” policy.usc.edu/scampuspartb. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, <http://policy.usc.edu/scientific-> misconduct.

Incomplete Grades:

Mark of IN (incomplete) may be assigned when work is not completed because of a documented illness or other “emergency” that occurs after the 12th week of the semester (or the twelfth week equivalent for any course that is scheduled for less than 15 weeks).

An “emergency” is defined as a serious documented illness, or an unforeseen situation that is beyond the student’s control, that prevents a student from completing the semester. Prior to the 12th week, the student still has the option of dropping the class. Arrangements for completing an IN must be initiated by the student and agreed to by the instructor prior to the final examination. If an Incomplete is assigned as the student’s grade, the instructor is required to fill out an **“Assignment of an Incomplete (IN) and Requirements for Completion”** form which specifies to the student and to the department the work remaining to be done, the procedures for its completion, the grade in the course to date, and the weight to be assigned to work remaining to be done when the final grade is computed. Both the instructor and student must sign the form with a copy of the form filed in the department. Class work to complete the course must be completed within one calendar year from the date the IN was assigned. The IN mark will be converted to an F grade should the course not be completed.

COURSE CALENDAR/READINGS/CLASS SESSIONS

	Topics/ Daily Activities (order of topics subject to change)	Readings and Homework	Deliverables and Due Dates
Week 1	Introduction & Key Drivers; Cybersecurity	Read “Software is Eating the World” by beginning of class	
Week 2	Cloud Computing; Post-Screen Usability	Read “Startup = Growth” by the beginning of class	Analysis memo, due by beginning of class
Week 3	Digital Currency & Payments; Messaging & Social Commerce	Digital Currency & Payments, Messaging & Social Commerce course content	
Week 4	Big Data; Autonomous Vehicles	Big Data & Autonomous Vehicles course content	Individual paper, due by beginning of class
Week 5	Physical-Digital Convergence; Internet of Things	PD Convergence & IoT course content	Group project proposal, due by beginning of class
Week 6	Artificial Intelligence	Artificial Intelligence course content	
Finals	Final Group Project Presentations	n/a	Group written presentation due, and presentations during exam period

Please note: The date/time of the Final Exam is determined by the University. For the date and time of the final for this class, consult the USC *Schedule of Classes* at www.usc.edu/soc. Select the corresponding semester to view and click on the “Final Examinations Schedule” link on the left side of the screen.

Appendix I. MARSHALL GRADUATE PROGRAMS LEARNING GOALS

How DSO 531 Contributes to Marshall Graduate Program Learning Goals

Marshall Graduate Program Learning Goals	DSO 531 Objectives that support this goal	Assessment Method*
Learning Goal #1: Develop Personal Strengths. Our graduates will develop a global and entrepreneurial mindset, lead with integrity, purpose and ethical perspective, and draw value from diversity and inclusion.		
1.1 Possess personal integrity and a commitment to an organization's purpose and core values.		
1.2 Expand awareness with a global and entrepreneurial mindset, drawing value from diversity and inclusion.	Learning Objective 1	Class Participation, Individual Papers
1.3 Exhibit awareness of ethical dimensions and professional standards in decision making.		
Learning Goal #2: Gain Knowledge and Skills. Our graduates will develop a deep understanding of the key functions of business enterprises and will be able to identify and take advantage of opportunities in a complex, uncertain and dynamic business environment using critical and analytical thinking skills.		
2.1 Gain knowledge of the key functions of business enterprises.	Learning Objective 3	Papers and Group project
2.2 Acquire advanced skills to understand and analyze significant business opportunities, which can be complex, uncertain and dynamic.	Learning Objective 1	Papers and Group project
2.3 Use critical and analytical thinking to identify viable options that can create short-term and long-term value for organizations and their stakeholders.	Learning Objective 2	All graded assignments

Learning Goal #3: Motivate and Build High Performing Teams. Our graduates will achieve results by fostering collaboration, communication and adaptability on individual, team, and organization levels.		
3.1 Motivate and work with colleagues, partners, and other stakeholders to achieve organizational purposes.	Learning Objective 4	Group project
3.2 Help build and sustain high-performing teams by infusing teams with a variety of perspectives, talents, and skills and aligning individual success with team success and with overall organizational success.	Learning Objective 4	Group project
3.3 Foster collaboration, communication and adaptability in helping organizations excel in a changing business landscape.	Learning Objective 4	Group project