

**Master of Accounting  
Universitas Gadjah Mada**

**Syllabus  
Strategic Information Systems and Governance**

**Hargo Utomo**

<b>UGM Central Building South Wing 2<sup>nd</sup> Floor Email:hargo_utomo@ugm.ac.id</b>		<b>UGM Science Technopark Jln. Raya Purwomartani, Kalasan, Yogyakarta</b>
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**COURSE DESCRIPTION**

Strategic Information Systems and Governance is an advanced course for students who intend to understand the complexity of managing information systems and technology for organizational productivity. Observation of the uniqueness of the organization's system, structure, strategy, and culture is needed as a foundation in building resilience and sustainable performance in a dynamic environment. The availability of information system architecture is needed as a basis for allocating productive resources supported by good governance and a climate of innovation that is conducive to the success and sustainability of the organization. Alignment between information technology investment and the direction of organizational strategy is a key point in examining compliance, propriety, and the impact of each strategic decision related to technology and innovation.

Therefore, understanding strategic information system planning has urgency in the context of decision-making and value creation for the organization. The topics discussed in this course are the trend of information and communication technology convergence and its impact on organizational governance, strategic information system planning, management of various information technology infrastructures, managing information technology outsourcing, and various supporting knowledge needed for organizations operating in the era of "knowledge-based economy". The focus of lecture activities is to build positive attitudes in students toward the strategic role of information systems in decision-making. The pedagogical methods will rely heavily on a combination of classical lectures and discussions of empirical study results on management of information systems and technology.

## REFERENCES

Selig, J.G., *Implementing IT Governance and IT Management*, 2nd Edition, Van Haren Publishing, Amersfoort, NL, 2015 (Digital Version-Google Play)

Maleh, Y., Sahid, A., Alazab, M., Belaissaoui, M., *IT Governance and Information Security: Guides, Standards, and Frameworks*, CRC Press, Taylor & Francis Group, 2021.

### **Additional References:**

Langer, M.A. and Yorks, L., *Strategic Information Technology: Best Practices to Drive Digital Transformation*, 2nd Edition, John Wiley International, New York, 2018.

Weill, P. and Ross, W.J., *IT Governance*, Harvard Business School Press, Boston, MA 2004 (A Classical Book)

Some topics in this course will refer to the results of empirical studies published in scientific and popular journals, including *Information Systems Research*, *Journal of Management Information Systems*, *International Journal of Accounting Information Systems*, *Harvard Business Review*, and proceedings from international conferences in the field of information systems and technology. Video clips and films will be used as supplementary materials or topical illustrations to become class discussion materials.

## LEARNING PROCESS

To achieve learning objectives, students are expected to have prepared themselves with materials according to the scheduled sessions and topics. Each student is required to read the textbooks and work on assignments individually as well as always be ready to discuss them in class during scheduled sessions. Students are encouraged to be able to put forward arguments based on the existing theoretical framework or their practical experience.

## ASSESSMENT

Midterm Exam	25%
Final Exam	25%
Participation and Discussion	25%
Mini Project	25%

Note: Class participation includes various student contributions in realizing learning objectives in class, including fulfillment of attendance and face-to-face meetings in

class, activeness in participating in the discussion process, and activeness in class. For mini-projects, students are required to deliver presentations on the development or implementation of strategic information systems. Mini-project materials can be sourced from observations of an object. Each student is allowed to present the results of their investigations in scheduled sessions. The creativity and innovation of each student will determine the best work results for the mini-projects managed.

## CLASS SCHEDULE

- Session #1: Introduction: A framework for developing strategic information systems and governance in organizations. Selig Chapter 2; Langer Ch1
- Article: Saragih, H.A., Ali, S., Suwardi, E., Utomo, H., "Finding the missing pieces to an optimal corporate tax saving: Information technology governance and internal information quality", *International Journal of Accounting Information Systems*, Vol. 52, 2024.
- Wilkin, L.C., Chenhall, H.R., "Information Technology Governance: Reflections on the Past and Future Directions", *Journal of Information Systems*, Vol. 34, No. 2 Summer 2020.
- Session #2: The strategic role of information systems and organizational governance in a dynamic environment. Selig Chapter 1; Langer Ch 2
- Article: Turel, O., Liua, P, Bartb, C., "Board-Level Information Technology Governance Effects on Organizational Performance: The Roles of Strategic Alignment and Authoritarian Governance Style", *Information Systems Management*, Vol. 34, NO. 2, 117–136, 2017
- Higgs, L.J., Pinsker, E.R, Smith, J.T., Young, R.G., "The Relationship between Board-Level Technology Committees and Reported Security Breaches", *Journal of Information Systems*, Vol. 30., no. 3, 2016
- Session #3: Building strategic alignment of information technology (Strategic IT Alignment) Selig Chapter 3; Langer Ch 3
- Article: Ping-Ju Wu, S., Straub, D., Ting-Peng Liang, "How information technology governance mechanisms and strategic

alignment influence organizational performance: Insights from a matched survey of business and its managers", *MIS Quarterly*, Vol. 39. No. 2., June 2015

Video clip: IT Leadership Insights and IT Governance  
<https://www.youtube.com/watch?v=3gPNazZ4x8s>

Session #4: Managerial considerations in managing organizational change  
Selig Chapter 4; Langer Ch 8

Article: Dawson, S.G., . Denford, S.J., Williams, K.C., Preston, D, and Desouza, C.K., "An Examination of Effective IT Governance in the Public Sector Using the Legal View of Agency Theory", *Journal of Management Information Systems*, Vol. 33, no. 4, pp. 1180–1208, 2016

Video Clip: IT Governance and Strategy  
<https://www.youtube.com/watch?v=6zWFVEY2kdo>

Session #5: IT Governance, Risk Management in Information System projects. Selig Chapter 5;

Article: Rodriguez, E., Edwards, S.J., "Transferring knowledge of risk management to the board of directors and executives", *Journal of Risk Management in Financial Institutions*, Vol. 5, 2 162–180., 2012

Article: Benaroch, M and Chernobai, A., "Operational IT failures, IT value destruction, and board-level IT governance changes", *MIS Quarterly*, Vol. 41., no. 3., September 2017

Session #6: IT service management and information resource management to improve organizational performance. Selig Chapter 6; Langer Ch 9

Article: Nicho, M., and Khan, S. "IT Governance Measurement Tools and its Application in ITBusiness Alignment", *Journal of International Technology and Information Management*, Vol. 26, no. 1 2017

Video Clip: <https://www.youtube.com/watch?v=6UbZY82twPY>

Session #7: Strategic sourcing, Cyber Security, and Information system operational risk control. Selig Chapter 7; Langer Ch10

Article: Chang, H.H., Lin, H.Y., Lu, Y.Y., Chen, W.Y., ” A Mixed-methods Study of Governance Mechanisms and Outsourcing Information System Services on Goal Performance”, *Pacific Asia Journal of the Association for Information Systems*, Vol. 5., no. 4, 2023.

Video Clip: IT Failure  
<https://www.youtube.com/watch?v=Z9VBi-VZ8Bo>

### ***Midterm Exam***

Session #8: Considerations in the implementation of integrated information technology systems and organizational performance. Selig Chapter 8;

Article: Naguib, M.H., Kassem, M.H., and Naem, A.M.A., ”The impact of IT governance and data governance on financial and non-financial performance”, *Future Business Journal*, Vol. 10., No. 15., 2024

Session #9: Big Data, Cloud Computing, and strategic information system management. Selig Chapter 9,

Article: Chen, H., Chiang, L.H.R., Store, C.V., “Business Intelligence and Analytics: from Big Data to Big Impact”, *MIS Quarterly*, Vol. 36 No. 4, pp. 1165-1188, December 2012

Session #10: Managing the sustainability of information technology resources

Article: Majchrzak, A., Markus, L.M, Wareham, J., “Designing For Digital Transformation: Lessons For Information Systems Research From The Study Of Ict And Societal Challenges”, *MIS Quarterly*, Vol. 40 No. 2, pp. 267-277, June 2016

Video Clip: Socially Responsible Corporate Governance  
<https://www.youtube.com/watch?v=y6GCegCamT8>

Session #11: IT governance and strategic challenges in implementing Knowledge Management. Weill and Ross Chapter 3

Article: Sampson, C.R., “R&D Alliances and Firm Performance: The Impact Of Technological Diversity and Alliance Organizations On Innovation”, *Academy of Management Journal* Vol. 50, no. 2, 364–386, 2007.

Session #12: Project Presentation and Discussion

Session #13: Project Presentation and Discussion

Session #14: Wrap-Up and Review Topics

*Final Exam*