### MGTA/R 5340: Management of Information Assets

## **Rio Grande College of Business**

Semester Year (Fall 2025, 2<sup>nd</sup>)

## **Faculty Information**

**Instructor**: Nanette Scarpellini Metz, Ph.D.

Office Hours: By Appointment

Office Location: Virtual

Email Address: Nanette.Metz@SulRoss.edu

**Phone:** 805.908.2575

Class Schedule: Asynchronous Classroom Location: Blackboard Ultra

## **Course Description**

This course provides a comprehensive overview of network and cloud services, infrastructure, and their underlying management mechanisms, including security and reliability, virtualization, data analytics, and commercial applications. Students will leave the course ready to make management decisions about these services that best benefit companies across contexts.

### **Course Materials**

Price, J., & Evans, N. (2024). *Information asset management: Why you must manage your data, information and knowledge the way you manage your money.* Routledge. ISBN: 9781032249711

### **Program Student Learning Outcomes**

Upon completion of the MS in Cybersecurity and Risk Assurance Program, students will be able to:

PO1: Analyze complex financial scenarios to identify, assess, and mitigate risks.

PO2: Analyze cybersecurity management scenarios to identify, assess, and mitigate risks.

PO3: Design comprehensive governance frameworks and risk management strategies to

ensure organizational resilience and regulatory compliance

PO4: Solve complex business problems and plan to manage organizational change effectively

### **Course Student Learning Outcomes**

Upon successful completion of this course, students will be able to:

- CSLO.1: Design and evaluate data governance frameworks for cloud and hybrid infrastructures.
- CSLO.2: Leverage advanced data analytics and visualization tools to manage largescale information assets.
- CSLO.3: Apply zero trust architecture principles and emerging practices in access control and privacy protection.
- CSLO.4: Assess ethical and legal implications of AI enhanced information management systems.
- CSLO.5: Simulate asset ecosystem scenarios (e.g. cloud migration) to improve strategic decision making.

#### **Marketable Skills**

Students completing the program will be able to:

- Assess and quantify cybersecurity and associated asset risks in organizational contexts.
- Communicate risk assurance strategies to internal and external stakeholders effectively.
- Lead organizational change initiatives by aligning technology, processes, and people.

**Course Assignments and Grading** 

Commented [WC1]: This might be my recommendation Nanette. It seems like quite a bit of work.

Overview of Required Assignments	% of Final Grade
Discussions	20%
Asset Inventory Map	25%
Cloud Architecture Assessment	25%
Al Policy Draft	10%
Strategic Policy Memo	20%
TOTAL	100%

Overview of Required Assignments	% of Final Grade
Weekly Discussion (8)	20%
<b>Asset Inventory Map</b> – Identify, classify, and assess the value and lifecycle of organizational information assets.	10%
Cloud Architecture Assessment – Design a cloud or hybrid architecture plan; identify risks and propose mitigation strategies.	15%
AI Policy Draft – Create a policy framework for responsible AI use in information asset management.	10%
Dashboard Prototype – Create an initial dashboard layout using real or simulated asset management data.	10%
<b>Strategic Policy Memo</b> – Recommend an asset management decision using risk and cost–benefit analysis.	10%
Final Governance Strategy & Reflection – Integrate governance, compliance, and ethical considerations into a final plan and reflect on learning.	25%
Total	100%

# Commented [WC2]: These were the SMEs recommendations.

Commented [NM3R2]: I added in the discussion to the grade and have dropped two of the assignments. The remaining assignments are all components of the final assignment which includes creating a voiceover presentation.

### **Late Assignment Statement:**

Assignments are due by 11:59 pm on the posted due date. Late submissions will be accepted up to 48 hours past the deadline with a 10% deduction per day. Work submitted more than 48 hours after the due date will not be accepted unless prior arrangements have been made with the instructor for extenuating circumstances. Participation in discussions must follow module timelines; late posts may not receive credit.

### Asset Inventory Map - 10%

Criteria	Exceeds Standard	Meets Standard	Approaching Standard	Below Standard
Completeness	All major information assets identified, categorized, and classified with lifecycle stage.	Most major assets identified; basic classification provided.	Some assets identified; classification incomplete.	Few or no assets identified; classification missing.
Accuracy	Correct asset details (type, owner, value, risk level).	Mostly correct details; minor errors.	Some incorrect or missing details.	Many inaccuracies or omissions.
Strategic Insight	Shows clear understanding of asset value and its role in organizational strategy.	Links some assets to strategy or value.	Limited mention of asset value or strategy.	_
Presentation	Well-formatted, professional diagram or table; easy to read.	Clear format with minor errors.	Format is cluttered or unclear.	Poorly organized or hard to read.

### **Cloud Architecture Assessment – 15%**

Criteria	Exceeds Standard	Meets Standard	Approaching Standard	Below Standard
Architecture Design	cloud/hybrid	Proposes workable architecture; rationale provided.	Architecture is basic; rationale vague.	Architecture is unclear or missing.
Risk Identification	compliance,	Identifies main risks with some mitigation ideas.	Mentions few risks; little mitigation detail.	Risks not identified or addressed.
Strategic Fit	Design aligns with organizational goals and governance frameworks.	Some alignment to goals/frameworks.	10	No connection to goals/frameworks.
Clarity	Well-documented with diagrams; professional tone.	Documentation mostly clear.	Documentation inconsistent.	Poor or missing documentation.

### Al Policy Draft – 10%

Criteria	Exceeds Standard	Meets Standard	Approaching Standard	Below Standard
Policy Scope	controls, governance, and compliance for Al in	Covers most key areas; some detail missing.	few areas.	Incomplete or irrelevant content.
	Aligns with NIST, ISO, GDPR or relevant	Mentions alignment with some standards.	reference to	No reference to standards.

Criteria	Exceeds Standard	Meets Standard	Approaching Standard	Below Standard
Clarity		Mostly clear; minor errors.	sections or	Disorganized or unclear.

### Dashboard Prototype - 10%

Criteria	Exceeds Standard	Meets Standard	Approaching Standard	Below Standard
	Chooses relevant, high-quality data and prepares it for visualization.	data; some	Data relevance or preparation incomplete.	Irrelevant or unprepared data.
Visualization Quality	Clear, interactive charts/tables suited to audience.		Limited chart variety or unclear visuals.	Poor or unreadable visuals.
Insights	findings tied to asset	Provides general findings; some governance link.	Findings are vague or unrelated.	No meaningful findings.

## Strategic Policy Memo – 10%

Criteria	Exceeds Standard	Meets Standard	Approaching Standard	Below Standard
Clarity of Position	Clearly states decision, rationale, and expected outcomes	some	States decision with minimal rationale.	No clear decision or rationale.
Evidence & Standards	data and aligns with	evidence or standard	Minimal evidence or no clear standard link.	No evidence or standards used.

Criteria	Exceeds Standard	Meets Standard	Approaching Standard	Below Standard
Professionalism		, ,		Disorganized or unclear.

## Final Governance Strategy & Reflection – 25%

Criteria	Exceeds Standard	Meets Standard	Approaching Standard	Below Standard
Comprehensiveness	Fully integrates governance, compliance, ethics, and technology strategy.	Integrates most elements; minor gaps.	elements; major	Minimal or missing integration.
Reflection Depth	Insightful reflection on learning and course application to real- world contexts.	General reflection with some insights.	Minimal reflection.	No reflection.
Presentation Quality	Clear, engaging, professional visuals and writing.	Adequate visuals and writing.	*	Poor or missing presentation.

### **Course Schedule**

## 8-Week Course Schedule – Fall 2025 (Oct. 19 – Dec. 14)

Module	Dates	Key Topics & Assignments	Readings
1	Oct. 20 - 26	understanding data lifecycles.	Price & Evans Ch. 1–2 (strategic value & asset inventory); Stevens Ch. 1 (GRC foundations).

Module	Dates	Key Topics & Assignments	Readings
		Assets • Assignment: Asset Inventory Map	
2	Oct. 27 – Nov. 2	Cloud Architecture – Cloud and hybrid infrastructure design principles; migration considerations.  Due Nov. 2:  Discussion: Cloud Migration Benefits & Risks  Assignment: Cloud Architecture Assessment	Price & Evans Ch. 8 (enabling technologies – cloud & big data); Stevens Ch. 3 (governance frameworks for tech adoption).
3	Nov. 3 – 9	Al Governance (Part 1) – Responsible Al frameworks; ethics in Al data systems. Due Nov. 9: Discussion: Responsible Al Principles	Price & Evans Ch. 9 (Al & ML in asset management); Stevens Ch. 4 (Al governance principles).
4	Nov. 10 - 16	Al Governance (Part 2) – Policies for Al data systems; integrating Al into organizational governance.  Due Nov. 16:  Discussion: Al Policy Challenges  Assignment: Policy Draft for Al Asset Management	Price & Evans Ch. 9 (policy alignment); Stevens Ch. 5 (risk & compliance in Al systems).
5	Nov. 17 – 23	Data Analytics (Part 1) – Advanced analytics techniques; visualization principles.  Due Nov. 23: Discussion: Data Visualization Best Practices Assignment: Dashboard Prototype	Price & Evans Ch. 6 (data quality & analytics); supplemental case study on Power BI/Tableau dashboards.
6	Nov. 24 – 30	Data Analytics (Part 2) – Observability tools; monitoring for compliance and performance.  Due Nov. 30 • Discussion: Observability in Asset Management • Assignment: Strategic Policy Memo	Price & Evans Ch. 7 (monitoring & measurement); Stevens Ch. 6 (continuous compliance & monitoring).
7	Dec. 1 - 7	Decision Making – Applying risk and cost–benefit analyses to asset management decisions.  Due Dec. 7:  Discussion: Case Study – Data Asset Investment Decision	Price & Evans Ch. 3–4 (governance & ROI evaluation); Stevens Ch. 2 (decision frameworks in GRC).
8	Dec. 8 - 14	Ethics & Wrap-Up – Ethical and legal issues in Al-enhanced data management; synthesis.  Due Dec. 9:  Discussion: Ethical Challenges &	Price & Evans Ch. 5 (ethics & legal frameworks); Stevens Ch. 7 (future of Al-driven GRC).

Module	Dates	Key Topics & Assignments	Readings
		Lessons Learned • Assignment: Final Governance Strategy & Reflection	

### Week-by-Week Focus & Deliverables

Week	Dates	Focus & Key Topics	Deliverables
Week 1	Oct. 20 - 26	Asset Ecosystems – Inventory & classification of data assets; lifecycles.	Asset Inventory Map due Oct. 26.
Week 2		Cloud Architecture – Cloud/hybrid design; migration considerations.	Cloud Architecture Assessment due Nov. 2.
Weeks 3–4	Nov. 3 - 16	Al Governance – Responsible Al frameworks; Al data system policies.	Al Policy Draft due Nov. 16.
Weeks 5–6		Data Analytics – Advanced analytics; observability tools.	Dashboard Prototype due Nov. 23; Strategic Policy Memo due Nov. 30.
Week 7	Dec. 1 - 7	Decision Making – Risk & cost– benefit analyses for assets.	
Week 8	Dec. 8 - 14		Final Governance Strategy & Reflection due Dec. 9.

#### **ADA Statement**

SRSU Accessibility Services. Sul Ross State University (SRSU) is committed to equal access in compliance with the Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the student's responsibility to initiate a request each semester for each class. Students seeking accessibility/accommodations services must contact Mrs. Mary Schwartze Grisham, LPC, SRSU's Accessibility Services Director or Ronnie Harris, LPC, Counselor, at 432-837-8203 or email mschwartze@sulross.edu or ronnie.harris@sulross.edu. RGC students can also contact Alejandra Valdez, at 830-758-5006 or email alejandra.valdez@sulross.edu. Our office is located on the first floor of Ferguson Hall, room 112, and our mailing address is P.O. Box C122, Sul Ross State University, Alpine. Texas, 79832.

#### **Student Responsibilities Statement**

All full-time and part-time students are responsible for familiarizing themselves with the Student Handbook and the Undergraduate & Graduate Catalog and for abiding by the University rules and regulations. Additionally, students are responsible for checking their Sul Ross email as an official form of communication from the university. Every student is expected to obey all federal, state and local laws and is expected to familiarize themselves with the requirements of such laws.

#### **SRSU Distance Education Statement**

Students enrolled in distance education courses have equal access to the university's academic support services, such as library resources, online databases, and instructional technology support. For more information about accessing these resources, visit the SRSU website.

Students should correspond using Sul Ross email accounts and submit online assignments through Blackboard, which requires a secure login. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as described in the student handbook. Students in web-based courses must maintain appropriate equipment and software, according to the needs and requirements of the course, as outlined on the SRSU website. Directions for filing a student complaint are located in the student handbook.

#### Counseling

Sul Ross has partnered with TimelyCare where all SR students will have access to nine free counseling sessions. You can learn more about this 24/7/365 support by visiting Timelycare/SRSU. The SR Counseling and Accessibility Services office will continue to offer inperson counseling in Ferguson Hall room 112 (Alpine campus), and telehealth Zoom sessions for remote students and RGC students.

#### Libraries

The Bryan Wildenthal Memorial Library and Archives of the Big Bend in Alpine offer FREE resources and services to the entire SRSU community. Access and borrow books, articles, and more by visiting the library's website, library.sulross.edu/. Off-campus access requires logging in with your LobolD and password. Librarians are a tremendous resource for your coursework and can be reached in person, by email (srsulibrary@sulross.edu), or by phone (432-837-8123).

No matter where you are based, public libraries and many academic and special libraries welcome the general public into their spaces for study. SRSU TexShare Cardholders can access additional services and resources at various libraries across Texas. Learn more about the TexShare program by visiting library.sulross.edu/find-and-borrow/texshare/ or ask a librarian by emailing srsulibrary@sulross.edu.

Mike Fernandez, SRSU Librarian, is based in Eagle Pass (Building D-129) to offer specialized library services to students, faculty, and staff. Utilize free services such as InterLibrary Loan (ILL), Scanlt, and Direct Mail to get materials delivered to you at home or via email.

#### **Academic Integrity**

Students in this class are expected to demonstrate scholarly behavior and academic honesty in the use of intellectual property. Students should submit work that is their own and avoid the temptation to engage in behaviors that violate academic integrity, such as turning in work as original that was used in whole or part for another course and/or professor; turning in another person's work as one's own; copying from professional works or internet sites without citation; collaborating on a course assignment, examination, or quiz when collaboration is forbidden. Students should also avoid using open Al sources *unless permission is expressly given* for an assignment or course. Violations of academic integrity can result in failing assignments, failing a class, and/or more serious university consequences. These behaviors also erode the value of college degrees and higher education overall.

#### **Classroom Climate of Respect**

Importantly, this class will foster free expression, critical investigation, and the open discussion of ideas. This means that all of us must help create and sustain an atmosphere of tolerance, civility, and respect for the viewpoints of others. Similarly, we must all learn how to probe, oppose and disagree without resorting to tactics of intimidation, harassment, or personal attack. No one is entitled to harass, belittle, or discriminate against another on the basis of race, religion, ethnicity, age, gender, national origin, or sexual preference. Still, we will not be silenced by the difficulty of fruitfully discussing politically sensitive issues.

#### **Supportive Statement**

I aim to create a learning environment for my students that supports various perspectives and experiences. I understand that the recent pandemic, economic disparity, and health concerns, or even unexpected life events may impact the conditions necessary for you to succeed. My commitment is to be there for you and help you meet the learning objectives of this course. I do this to demonstrate my commitment to you and to the mission of Sul Ross State University to create a supportive environment and care for the whole student as part of the Sul Ross Familia.

If you feel like your performance in the class is being impacted by your experiences outside of class, please don't hesitate to come and talk with me. I want to be a resource for you.	