Al and Money IAP 2026

Professor Gary Gensler; E62-423, <u>gensler@mit.edu</u> January 9 - 10, 2026 (8:30 - 11:30 am & 1:00 – 4:00 pm)

Open to current EMBA students (EMBA26s and EMBA27s), Sloan MBA Fellows, and alumni from the EMBA and Sloan Fellows communities. No pre-requisites.

Teaching Assistants: Heidi Johnson, heidij26@mit.edu; Hongshen Sun sunhs@mit.edu

3 units. Grading P / D / F

Synopsis

'Al and Money' examines the evolving impact of artificial intelligence on finance, money, and risk. The goal is to help students gain critical reasoning skills on how to seize commercial opportunities - and maintain relevance - at the intersection of these two dynamically changing fields. One - Al - a set of rapidly changing tools. The other - finance - a dynamic network for the pricing and allocation of money and risk.

Students will explore how machine learning, generative AI, and advanced analytics are redefining asset management, trading, underwriting, finance functions, customer interactions, and compliance. The course also will touch upon real-world commercial implications related to AI supply chain decisions, AI tech stacks, data centers, and regulatory frameworks.

We also explore how these developments in AI and finance could potentially affect economics, markets, and monetary policy around the world.

Course Outline

Day 1: Artificial Intelligence

Intro to AI & Money, Finance, & FinTech
Traditional Predictive Models, Generative AI, & Recent Developments
AI Tech Stack, Supply Chains, & Data Centers
AI Performance Drivers, Economics, & Regulatory Frameworks

Day 2: Al in Finance

Customer Interactions, Compliance, & CFO Functions Trading & Asset Management Underwriting Credit & Insurance Monetary Policy, Markets, & Conclusion

Requirements

This is a discussion-based course in which <u>your active participation is integral</u> to the course design. Reading the required materials and being prepared to engage with the study questions are essential for your learning experience. Please come to class prepared to speak, listen, and learn. Note that the *use of cell phones, laptops, or other electronic devices is prohibited* during class. Further, classroom discussion *is not to be recorded in any fashion*.

The contribution of each requirement toward the final grade is as follows:

1. Class Participation (including discussions)

50%

2. Individual Paper (due by 1/18)

50%

Al Use Guidance

Al, used appropriately, can enhance one's learning, but please proceed with caution.

If I were to input this class's title into Chat GPT and asked for a syllabus, the results would be a superficial class with little depth, nuance, or context. Similarly, if students prepare for class simply by reading an AI summary of the required readings and write memos based on AI, they will shortchange developing their critical reasoning from this learning opportunity.

To best learn – and remain relevant - you need to engage directly with the readings, class, and teaching team, reflect critically, and train your most powerful processor: your human brain. In a world with ubiquitous generative AI tools, the competitive edge comes not simply from writing clever prompts – but from your judgment, reasoning, and originality. If you have questions about this, consider a recent MIT Media Lab study (June 2025) exploring the cognitive costs of LLM-assisted essay writing.

All readings and memos must reflect your own thinking—not a machine's. Your ideas, analysis, recommendations, and structure must be your own. Al should not replace your own reasoning, argument structure, or analytical voice. Please take full ownership of your work — reviewing, editing, and supplementing to ensure accuracy and that all phrasing reflects your own understanding, decisions, rigor, and voice.

Memos that lean heavily on AI tools or rely on generalizations are less likely to help you learn. Best to be original, use your own reasoning, structure, and analytical voice – not merely echo AI output or others' writing. Where appropriate, use firm-specific references, line of business-specific metrics, and real-world business model dynamics.

If you use AI tools to assist in drafting, outlining, researching, or editing any part of your memo, include a brief section labeled "Reflections." (Not included in word count, max 150 words.) It should describe how you approached the assignment and used AI – highlighting the specific ideas, tradeoffs, or judgment calls that reflect your own thinking.

For transparency, I share that I have used AI tools to support parts of syllabus development – including assistance with searching the web for reading materials, organizing ideas, and reviewing text for clarity, grammar, and completeness. All final content – including course design, readings, and study questions – reflects my own judgment and professional expertise.

Individual Paper: "Redesigning Business with AI: A CEO Memo" (due by 1/18)

This <u>individual</u> project (1000 – 1500 words) is due by **Sunday, January 18**. You should write as if you are a senior strategy advisor to the CEO of a real financial services firm (You pick the firm and commercial setting). The CEO has asked for a detailed, confidential brief proposing a **new AI-enabled business model, business practice, product, service, or customer interface** – not just automation of existing tasks, but an innovation that meaningfully reshapes how the financial firm creates value.

Your paper should make a **clear strategic recommendation** – proposing a novel, AI-enabled business transformation that creates value to the firm. The goal is to demonstrate your **critical reasoning and understanding** of how AI can be applied **commercially within a specific area of finance**, while providing a concrete, realistic recommendation to a real-world CEO. Your memo should go beyond surface-level optimism and instead reflect your own reasoning, choices, trade-offs, and sector-specific thinking.

Detailed Schedule

Session 1 (1/9 8:30 AM): Intro to AI & Money, Finance, & FinTech

Readings: TBD

Study Questions/Issues to Prepare: TBD

Session 2 (1/9 10 AM): Traditional Predictive Models, Generative AI, & Recent AI Developments

Readings: TBD

Study Questions/Issues to Prepare: TBD

Session 3 (1/9 1 PM): AI Tech Stack, Supply Chains, & Data Centers

Readings: TBD

Study Questions/Issues to Prepare: TBD

Session 4 (1/9 2:30 PM): AI Performance Drivers, Economics, & Regulatory Frameworks

Readings: TBD

Study Questions/Issues to Prepare: TBD

Session 5 (1/10 8:30 AM): Customer Interactions, Compliance, & CFO Functions

Readings: TBD

Study Questions/Issues to Prepare: TBD

Session 6 (1/10 10 AM): Trading & Asset Management

Readings: TBD

Study Questions/Issues to Prepare: TBD

Session 7 (1/10 1 PM): Underwriting Credit & Insurance

Readings: TBD

Study Questions/Issues to Prepare: TBD

Session 8 (1/10 2:30 PM): Monetary Policy, Markets, & Conclusion

Readings: TBD

Study Questions/Issues to Prepare: TBD

AI & Money Bookshelf

You also might find this <u>'Primer on ChatGPT'</u> video by MIT Sloan's Rama Ramakrishnan of interest. Please also review for reference these glossaries of terms: a) <u>'Glossary of Terms: Generative AI Basics'</u>, MIT Sloan Teaching & Learning Technologies; b) <u>'AI Glossary by a16z'</u>, Andreessen Horowitz; or c) <u>'Google's Machine Learning Glossary'</u>, Google. Slides will be posted prior to each class.

You also might find this book on artificial intelligence of interest: 'Al Engineering: Building Applications with Foundation Models'