# Artificial Intelligence in Marketing

## MKT 6364.501 — Fall 2026

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## Contents

*This syllabus is subject to change at the discretion of the instructor.*

# 1 Instructor Information

- **Name:** Behnam Mohammadi
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- **Email:** bxm180038@utdallas.edu
- **Office Location:** JSOM II 13.310
- **Office Hours:** Per appointment. Email me to schedule.

# 2 Prerequisites

- Prerequisite or Corequisite: OPRE 6301 or OPRE 6359 or MKT 6379. (3-0) Y
- You must bring a **personal laptop** to every class session. This is non-negotiable as the course is entirely hands-on.
  - **iPads, tablets, phones, and Chromebooks are not acceptable.** You need a full operating system (Windows, macOS, or Linux) to run the software we will use.
  - **Work laptops are not recommended.** We will install software during the semester, and your machine must allow you to install applications without IT approval.
- Make sure your laptop is charged or bring your charger.
- No prior programming experience is required, but you should be comfortable navigating your computer's file system and installing applications.

  **IMPORTANT: READ BEFORE ENROLLING**

  There is **no textbook** for this course. Instead, you will pay for **API access and possibly subscriptions** to AI tools used throughout the semester. These are re-

quired, not optional. Your total out-of-pocket cost will not exceed what you would spend on a typical textbook, but the exact amount depends on your usage.

These costs are **your responsibility**. As of now, the university does not cover them.

# 3 Course Description

This graduate course combines theory with intensive hands-on practice in applying AI, specifically large language models (LLMs) and agentic AI systems like the mechanism used in Claude Code, to marketing problems. You will learn how LLMs work at a conceptual level (tokens, context windows, temperature, structured outputs), how tool/function calling connects models to external systems, and how to build autonomous agents that reason, plan, and act. The primary no-code platform is **n8n** for workflow automation. The course also addresses data governance, copyright, privacy, ROI measurement, and how to write effective business requirements when working with technical teams to deploy AI.

This is a graduate-level course. Assignments are more demanding, expectations for analytical depth are higher, and **every assignment score counts toward your final grade.**

# 4 Learning Objectives

By the end of this course, you will be able to:

- Explain how large language models process text and generate responses, including the role of tokens, context windows, and sampling parameters.
- Design and evaluate prompts using structured techniques (system prompts, few-shot examples, chain of thought, output schemas).
- Use AI to generate and critically evaluate marketing content, structured data, and analytical outputs.
- Explain what tool/function calling is, how it works, and why it is the foundation of agentic AI.

- Build multi-step automated workflows in **n8n** that integrate AI with marketing platforms and data sources.
- Design, build, and evaluate AI agents that can reason, use tools, and complete complex marketing tasks autonomously.
- Assess the risks of deploying generative AI in business such as hallucinations, prompt injection, copyright, bias, data governance, and propose mitigations.
- Write clear business requirements and evaluation criteria for AI-powered marketing systems.
- Analyze the ROI of AI adoption in marketing contexts.

# 5 Class Structure

- **When:** Thursdays, 7:00 – 9:45 PM
- **Where:** JSOM 2.107

Each session is split into two halves with a break:

| Block | Time |
|---|---|
| Part 1 | 7:00 – 8:15 PM |
| Break | 8:15 – 8:30 PM |
| Part 2 | 8:30 – 9:45 PM |

Sessions combine instruction with live, hands-on work. You will follow along on your laptop during most sessions.

# 6 Semester Schedule

The schedule below lists every class session, assignment post/due dates, and holidays. Topics are tentative and may shift as the semester progresses.

## 6.1 First Half: Foundations and Core Concepts

| Session | Date | Topic (tentative) | Assignments |
|---|---|---|---|
| 1 | Thu, Aug 27 | Course overview; AI landscape | — |
| 2 | Thu, Sep 3 | How LLMs work (tokens, embeddings, context, sampling) | **A1 posted** |
| 3 | Thu, Sep 10 | Prompt engineering: system prompts, few-shot, chain of thought | — |
| 4 | Thu, Sep 17 | Structured outputs, schemas, and content generation at scale | A1 due Sun, Sep 13; **A2 posted** |
| 5 | Thu, Sep 24 | Evaluating AI output; failure modes, hallucinations, bias | — |
| 6 | Thu, Oct 1 | APIs and tool/function calling: how models interact with the world | A2 due Sun, Sep 27; **A3 posted** |
| 7 | Thu, Oct 8 | Designing tool interfaces; structured I/O for real systems | — |
| 8 | Thu, Oct 15 | Mid-semester review and case discussion | A3 due Sun, Oct 11; **A4 posted** |

## 6.2 Second Half: Agentic AI, Automation, and Deployment

| Session | Date | Topic (tentative) | Assignments |
|---|---|---|---|
| 9 | Thu, Oct 22 | Introduction to n8n; building your first AI workflow | — |
| 10 | Thu, Oct 29 | Multi-step n8n workflows with AI nodes and integrations | A4 due Sun, Oct 25; **A5 posted** |
| 11 | Thu, Nov 5 | AI agents: architectures, reasoning loops, planning | — |
| 12 | Thu, Nov 12 | Building and testing agents in n8n | A5 due Sun, Nov 8; **A6 posted** |

| Session | Date | Topic (tentative) | Assignments |
|---|---|---|---|
| 13 | Thu, Nov 19 | Advanced agents; marketing automation case studies | — |
| — | Thu, Nov 26 | **NO CLASS — Thanksgiving** | — |
| 14 | Thu, Dec 3 | Ethics, governance, ROI, and course wrap-up | A6 due Sun, Nov 29; **A7 posted** |
| — | Sun, Dec 13 | — | **A7 due** |

There is no final exam. Assignment 7 is due Sunday, December 13 at 11:59 PM (during finals week).

# 7 Assignments

All assignments are **individual work**. There are no group projects.

There are 7 **assignments** total. A new assignment is posted approximately every two weeks. Assignments never overlap; one closes as the next opens. You are encouraged (and often required) to use AI tools to complete assignments. When you do, you must disclose which tools you used and provide your prompts or instructions.

Graduate assignments demand more depth and rigor than the undergraduate equivalents. Expect more complex scenarios, higher expectations for analysis, and assignments that require you to connect technical implementation to business outcomes.

## 7.1 Deadlines

Each assignment is due on **Sunday at 11:59 PM**, approximately two weeks after it is posted. Exact dates are listed in the schedule above. Late submissions receive a **zero** unless you have a documented excuse (illness, family emergency, etc.). Submit early; technical problems at 11:58 PM are not an excuse.

Resubmissions are not accepted.

## 7.2 File Upload

Upload your work to **Canvas** by the deadline. If the assignment is a website or app, zip all files. Include screenshots, prompts, and any other relevant materials. Name the file `Assignment#_YourName.zip` (e.g., `Assignment1_SarahCooper.zip`).

## 7.3 Grading Timeline

Grades are returned within **2 weeks** of the submission deadline. Check Canvas for your scores and feedback.

**Exception**: Assignment 7 grades will be returned by the university's final grade deadline (Monday, December 21).

# 8 Grading

There are no exams or quizzes. Your grade is based entirely on assignments.

## 8.1 Final Grade

Your final grade is the **average of all 7 assignment scores** across the entire semester. There is no separate midterm grade requirement for graduate courses.

## 8.2 Bonus Points

While attendance is not mandatory, approximately **3 times** during the semester (unannounced), I will award a **bonus point** to every student who is present in class that day. Each bonus point adds **1 percentage point** to your final numeric grade. For example, if your calculated final grade is 87% and you earned 3 bonus points, your final grade becomes 90%.

## 8.3 Grading Scale

Letter grades are assigned from the final numeric grade (after bonus points) using the following standard scale:

| Percentage | Grade | Percentage | Grade |
|---|---|---|---|
| 97–100% | A+ | 77–79% | C+ |
| 93–96% | A | 73–76% | C |
| 90–92% | A- | 70–72% | C- |
| 87–89% | B+ | 67–69% | D+ |
| 83–86% | B | 63–66% | D |
| 80–82% | B- | 60–62% | D- |
| | | 0–59% | F |

# 9 Attendance and Participation

Attendance is not mandatory and is not graded. That said, nearly all learning happens during class sessions. If you do not attend, you will likely struggle with the assignments.

Please arrive no later than 10 minutes after the scheduled start time. Write your name on a nametag or piece of paper and bring it to each class.

# 10 Academic Integrity

You are expected to use AI tools in this course, that is the point. However, you must always disclose what tools you used and how. Passing off AI-generated work as your own reasoning, or copying another student's submission, is a violation of UT Dallas academic integrity policies and will be handled accordingly.

# 11 Accommodations

Students who need academic accommodations should contact the Office of Student Access-Ability (SAC) and provide their accommodation letter to the instructor at the start of the semester.