

Spring 2025
ISM 664-01
ONLINE ASYNCHRONOUS COURSE
CANVAS COURSE SITE: ISM 664-01
ISSCM Department
BSBE, UNCG

Course Title: Generative AI for Business

Professor INFORMATION

Name: Dr. Al F. Salam, Associate Professor of Information Systems, ISSCM Department
Email: amsalam@uncg.edu (Use this email to directly contact the Instructor)

Office Hours: Online Office Hours will be held via MS TEAMS as ISM 664-01 is an Asynchronous Online Course. It is completely **optional** for the students to attend the Online Office Hours, but a recording of the Online Office Hours will be made available for all students in the class via Canvas. Instructor will post and announce the times for these Online Office Hours as class progresses through the semester.

GENERAL INFORMATION

Graduate Level, 3 credit hours
Delivery: Online Asynchronous Mode (No Class Meeting Times per UNCG Regulation)

COURSE CATALOG DESCRIPTION

Focuses on Generative AI applications in Business, primarily on Large Language Models (LLMs) and Generative AI related to Image, Audio and Video Generation. Covers Transformer Architecture, Generative Modeling, Variational Autoencoders, Generative Adversarial Networks in the context of business applications and decisions.
Prerequisite Courses: None.

However, Python Programming background strongly encouraged as Gen AI is built upon Python libraries. Free LinkedIn Python Programming training courses are available via ISM 664 Canvas course site. Students are strongly encouraged to complete these Python training courses to pick up the necessary background.

COURSE DESCRIPTION

Principal Topics Covered

Introduction to Transformer Architectures, Encoder-Decoder Framework, Attention Mechanisms, Generative Adversarial Networks, Text Generation, Summarization, Multi-Modal Models and Applications in Business, Ethical and Responsible Generative AI, Generative AI Risk Assessment and Mitigation for Business and Society.

COURSE-SPECIFIC STUDENT LEARNING OUTCOMES (SLOs)

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

| SLO Number | Student Learning Outcomes |
|-------------------|--|
| 1 | Apply Neural Network and Transformer Architectures in the context of business problems and decisions. |
| 2 | Analyze Large Language Models in the context of business. |
| 3 | Evaluate Generative AI technologies for Text, Image, Audio and Video generation in the context of business problems and decisions. |
| 4 | Evaluate ethical and responsible application of Generative AI in the context business, organizations and society. |

REQUIRED AND RECOMMENDED TEXTS/READINGS

Two required Textbooks as shown below.
Additional reading materials will be made available via Canvas in time.
Note: Please get these two Textbooks ASAP.

REQUIRED TEXTBOOK I:

The screenshot shows the Amazon product page for the book "Building LLMs for Production: Enhancing LLM Abilities and Reliability with Prompting, Fine-Tuning, and RAG". The page includes the Amazon header with navigation menus, a search bar, and a breadcrumb trail: Books > Computers & Technology > Computer Science. The product title is "Building LLMs for Production" with a subtitle "with Prompting, Fine-Tuning, and RAG". The authors are Louis-François Bouchard and Louie Peters. The book has a 4.5-star rating from 98 reviews. A quote from Jerry Liu, Co-founder and CEO of Llamaindex, describes it as "the most comprehensive textbook to date on building LLM applications". The book is updated on October 2024. The "What's Inside" section lists 13 chapters covering topics from LLM introduction to deployment. The "Table of Contents" lists chapters from Introduction to Large Language Models to Deployment and Optimization. The "What Experts Think About The Book" section features testimonials from Pete Huang, Alex Volkov, and Shaw Talebi. The price is \$44.21, a 12% discount from \$49.99. The page also shows delivery options (Kindle, Hardcover, Paperback), a "Buy Now" button, and shipping information.

REQUIRED TEXTBOOK II:

NOTE: ALSO AVAILABLE THROUGH THE UNCG BOOKSTORE

The screenshot shows the Amazon product page for the book "Generative AI: The Insights You Need from Harvard Business Review" (HBR Insights Series) by Harvard Business Review (Author), Ethan Mollick (Author), David De Cremer (Author), Tsedal Neeley (Author), & 1 more. The book is a paperback, published on January 30, 2024, and has a 4.1-star rating from 75 reviews. The price is \$16.50, a 28% discount from the list price of \$22.95. The page includes a description of the book's content, author information, and purchasing options for Kindle, audiobook, and hardcover.

EVALUATION AND GRADING

Grading Scale

You will receive a score of 0 for any work not submitted. Late Assignments are subject to a 10% penalty per day late at the sole discretion of the instructor. Your final grade in the course will be a letter grade. Letter grade equivalents for achieved points (percentages) are estimated as follows:

| | | | | | |
|----------------------|----|----------------------|----|--|--|
| 95% or higher | A | 76 – < 80% | C+ | | |
| 90 – < 95% | A- | 70 – < 76% | C | | |
| 87 – < 90% | B+ | BELOW 70 | F | | |
| 83 – < 87% | B | | | | |
| 80 – < 83% | B- | | | | |

□ *The course grade will be based on the following distribution:*

- | | |
|--|-----|
| 1. Discussion Forum Participation and Contribution | 20% |
| 2. Midterm Exam | 25% |
| 3. Assignments | 25% |
| 4. Final Exam (Take Home Research Paper/Project) | 30% |

TOTAL 100%

□ *The following criteria will apply to the grading of assignments:*

A: Work that demonstrates not only a clear understanding of the material under study, but also a superior ability to utilize that material in the assignment. All criteria are met. The student's work goes beyond the task and contains additional, unexpected or outstanding features.

B: Work that demonstrates a good understanding of the material under study, and utilizes the material well in the assignment. The student meets the assignment criteria, with few errors or omissions.

C: Work that minimally demonstrates a basic or technical understanding of the material under study, and uses some relevant material in the assignment. Work may not address one or more criteria or may not accomplish what was asked.

F: Work that is incomplete, inappropriate and/or shows little or no comprehension of the material under study.

COMMUNICATION AND COURSE TECHNICAL GUIDELINES

Technical support: Students with technical issues with the course and email should contact 6TECH for support either by email or phone or chat (<https://its.uncg.edu/Help/6TECH/>).

Please also make your instructor aware of the issue, and if there will be any delays in resolving the issue.

ACADEMIC INTEGRITY POLICY

Each student is required to comply with the Academic Integrity Policy on all work submitted for the course. Refer to the following URL: <https://osrr.uncg.edu/academic-integrity/>.

ACCOMMODATIONS

UNCG seeks to comply fully with the Americans with Disabilities Act (ADA). Students requesting accommodations based on a disability must be registered with the Office of Accessibility Resources and Services (OARS) in 215 Elliott University Center, 334-5440, oars.uncg.edu.

Students may request accommodations for religious holidays under applicable laws. See <https://catalog.uncg.edu/academic-regulations-policies/university-policies/> for more information.

Students should remind the instructor in advance when accommodation affects course activities, e.g., before taking exams, to ensure that the instructor has updated systems accordingly.

HEALTH AND WELLNESS

Your health impacts your learning. Throughout your time in college, you may experience a range of health issues that can cause barriers to your learning. These might include physical ailments, illnesses, strained relationships, anxiety, high levels of stress, alcohol/drug problems, feeling down, or loss of motivation. Student Health Services and The Counseling Center can help with these or other issues you may be experiencing. You can learn about the free, confidential mental health services available on campus by calling 336-334-5874, visiting the website at <https://shs.uncg.edu/> or visiting the Anna M. Gove Student Health Center at 107 Gray Drive. Help is always available.

ATTENDANCE AND LATE WORK/MAKEUP POLICIES

Students with university-related or requested absences, e.g., field trips in other courses or multiple exams during finals week, must make prior arrangements in advance for any conflicts with their schedule and due dates for the course.

Students should review the following [Bryan School Faculty and Student Guidelines](#) to understand the roles and responsibilities of both students and faculty.

[Bryan School Student and Faculty Roles and Responsibilities](#)

FINAL EXAMINATION

Note: The take-home **Research Paper/Project** replaces the final exam. Details related to the Research Paper/Project will be provided in time.