

#### **Course Information**

Semester & Year: Summer 2025

Course Title: Current Topics in Computing

Course Prefix & Number: CIS 280AB

Section Number: 17149

Credit Hours: 2 hours

Start Date: 5/27/2025

End Date: 7/3/2025

Room Number: Online

Meeting Days: N/A

Meeting Times: N/A

#### **Course Format**

The course format for this course is Online.

## **Instructor Information**

Instructor: N. Dedakia

Email: nancy.dedakia@scottsdalecc.edu

Phone: 480-423-6574

Office Location: Virtual Meeting Room – Big Blue Button

Office Hours: Mondays and Tuesdays at 8 AM (Office hours will be adjusted from time to time and all updates will be within the Announcements in Canvas.) Please free to reach out if need to meet outside of these hours.

## **Course Description**

Critical inquiry of current topics in computing. Application of industry trends to solve problems and/or investigate issues. This course is designed for business professionals who want to understand and leverage Artificial Intelligence (AI) without needing technical expertise.

This course introduces students to the foundations and practical applications of Artificial Intelligence (AI), including the current landscape, types of models, and commonly used tools. Students will explore prompt engineering techniques to improve AI-generated output and analyze ethical, regulatory, and privacy concerns surrounding AI usage and content ownership. Through guided experimentation and real-world problem solving, learners will assess various AI tools and apply them to practical tasks. The course culminates in a final project where students design a functional AI solution addressing a contemporary challenge.

## **Prerequisites**

None

## **Course Competencies**

- 1. Identify the characteristics, origins, and relationships of the selected computing topic, including computer languages, methodologies, and/or application software. (I, II)
- 2. Trace the factors that have contributed to the development of the selected topic. (II, III, IV)
- 3. Demonstrate knowledge of the selected topic. (II-IV)
- 4. Collect, interpret, and evaluate data; or analyze problems and/or formulate solutions relating to the selected topic. (III-V)
- Assess the impact that the selected topic has had on society, culture, and/or the individual, and its role in the technological revolution. (IV)

#### **Special Topic Specific Artificial Intelligence Competencies**

- 1. Identify what Artificial Intelligence (AI) is and distinguish between the different types of Artificial Intelligence.
- 2. Select and utilize multiple Artificial Intelligence (AI) solutions based on the problem you are trying to solve.
- 3. Assess and evaluate Artificial Intelligence (AI) responses for accuracy.

- Demonstrate knowledge on how to prompt Artificial Intelligence (AI) for better outputs.
- 5. Access the current state of Artificial Intelligence (AI), its impact on society, including both strengths and weaknesses.

#### **Texts and Course Materials**

This course will rely on OER (Open Educational Resources) that will not require the purchase of any additional material. Some resources utilized include:

- Dan Hendrycks. Introduction to AI Safety, Ethics and Society. Taylor & Francis, 2024. ISBN: 9781032798028. URL: www.aisafetybook.com
- Mastering Generative AI and Prompt Engineering:
   <a href="https://datasciencehorizons.com/pub/Mastering\_Generative\_AI\_Prompt\_E">https://datasciencehorizons.com/pub/Mastering\_Generative\_AI\_Prompt\_E</a>
   <a href="mailto:ngineering\_ngth="ngineering">ngineering\_Data\_Science\_Horizons\_v2.pdf</a>

## **Course Technologies**

View the <u>Accessibility Statements & Privacy Policies</u> of technologies used in this course.

#### **Maricopa Systems**

This course uses key Maricopa systems for course management and communication.

- Canvas Learning Management System
- Student Maricopa Gmail Account
- Maricopa Open Educational Resource Learning System (MOER)

#### **Synchronous Communication Tools**

This course implements the use of web conferencing and/or other synchronous course tools.

• Big Blue Button/Google Meet

## **Streaming Media/Audio/Video Tools**

This course uses the following streaming media services.

YouTube

- ScreenPal
- WebEx

#### **Student Assignment Tools**

This course requires students to participate in or submit assignments using desktop or cloud-based applications.

- Google Products
- Microsoft Office 365
- ScreenPal
- Adobe Creative Cloud
- Various AI tools including but not limited to ChatGPT, Gemini, Microsoft CoPilot, Poe – Free Versions

Note this is an illustrative list of tools as there are many AI tools that are in the marketplace that we will be exploring. You may be required to create accounts to access these tools to be used for the duration of this course.

#### **Course Policies**

The following are policies specific to this course. Students are also responsible for the college policies included on the <u>Student Regulations</u> page of the Maricopa Community College District website.

## **Generative Artificial Intelligence (AI) Policy**

#### Opening Statement Regarding Generative Artificial Intelligence (AI)

The World Economic Forum defines generative AI as "a category of artificial intelligence (AI) algorithms that generate new outputs based on the data they have been trained on. Unlike traditional AI systems that are designed to recognize patterns and make predictions, generative AI creates new content in the form of images, text, audio, and more."

Some examples of generative AI tools include but are not limited to: ChatGPT, Google Gemini, Microsoft Copilot, Stable Diffusion, GrammarlyGo, and Adobe Firefly.

#### Generative Artificial Intelligence (AI) Allowed in All Contexts

In this class, you are permitted to use generative AI tools to complete your assignments. When submitting work that incorporates generative AI content, please clearly indicate

what content was generated by AI tools. As this is an AI focused course in some cases up to **100%** of your work should be generated by a generative AI tool, although the reflections and discussions should not be generated using an AI tool. If any part of this is confusing or uncertain, please reach out to me for a conversation before submitting your work.

#### **Disclaimer for AI Software and Usage**

By enrolling in this AI course, you acknowledge and agree to the following terms:

**Risk and Responsibility**: You understand that the use of Al tools involves certain risks. It is your responsibility to use these tools appropriately and ethically. You are solely responsible for what you post.

**Software Requirements**: To complete this course, you will be required to create logins and download various software applications. You are responsible for ensuring that your devices meet the necessary technical requirements.

#### **Guidelines and Best Practices:**

- Ethical Use: Always use Al tools in compliance with ethical standards.
- **Data Privacy**: Protect sensitive information and respect the privacy of others. Information entered into AI tools maybe retained by the software vendor.
- **Transparency**: Be transparent about the use of AI in your work and its implications.

**Intellectual Property Rights**: You retain ownership of your original work created during the course. However, any materials provided by the course, including software and resources, are protected by copyright and may not be reproduced or distributed without permission.

**Terms and Conditions Compliance**: You are responsible for adhering to all terms and conditions of any software used in the course, as well as any data you enter into these applications.

**Feedback and Evaluation**: Constructive feedback is encouraged, and you should be open to peer reviews and instructor evaluations.

**Updates and Changes**: Course materials and software may be updated, and you are responsible for keeping up with these changes.

**Informed Consent**: By participating, you consent to the collection of data for course improvement purposes, adhering to privacy standards.

**Liability**: The course instructors and institution are not liable for any issues or consequences arising from your use of AI tools.

## **Grading Standards & Practices**

#### **Grade Scale**

Letter Grade	Points Range
Α	90 – 100%
В	80 – 89%
С	70 – 79%
D	60 – 69%
F	0 – 59%

## Final Grade Calculation - Grade Weighting

Requirement	% Weight of Final Grade
Assignments, Discussions, and Quizzes	60%
Projects	40%
TOTAL:	100%

#### Student/Instructor Interaction

In this course, you can expect regular and substantive interaction (RSI) that aligns with Scottsdale Community College's mission to provide challenging and supportive learning experiences and the US Department of Education's requirement for regular and substantive interaction (RSI) for online courses. My commitment to your success includes the following:

- Sharing weekly information about the course materials, including key information, explanations, examples, and resources via in-person, recorded, and/or textbased lectures.
- Engaging in regular discussions about course content within discussion boards in Canvas or other discussion-based tools.
- Providing group or individual feedback regularly on assignments.
- Promptly responding to student questions about the course sent via email,
   MOER messaging, or the Canvas inbox.

- Regularly posting announcements about the course content and activities.
- Monitoring your academic progress and communicating concerns, as needed.

## Addressing Incidents of Title IX Sexual Harassment

In accordance with Title IX of the Education Amendments of 1972, the MCCCD prohibits unlawful sexual harassment against any participant in its education programs or activities. Sexual harassment includes quid pro quo (this for that) harassment, hostile environment, sexual assault, dating/domestic violence, and stalking. This prohibition against sexual harassment - including sexual violence - applies to students, MCCCD employees, and visitors to campus.

The policy of the MCCCD is to provide an educational, employment, and business environment free of sexual violence, unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct or communications constituting sexual harassment as prohibited by state and federal law. Incidents of Sexual Misconduct should be reported to the college Title IX Coordinator, as outlined in policy. MCCCD will provide on its <a href="Title IX">Title IX</a> and <a href="Preventing Sexual Harassment">Preventing Sexual Harassment</a> webpage a link to all <a href="Title IX">Title IX</a> Coordinators at the MCCCD. Reports may be filed anonymously at: <a href="https://district.maricopa.edu/consumer-information/reporting">https://district.maricopa.edu/consumer-information/reporting</a>. Discrimination against pregnant and parenting students is also prohibited under Title IX. For more information regarding pregnancy and parenting status, please visit the webpage Working with Pregnant and Parenting Students.

# Classroom Accommodations for Students with Disabilities

In accordance with the Americans with Disabilities Act (ADA), the Maricopa County Community College District (MCCCD) and its associated colleges are committed to providing equitable access to learning opportunities to students with documented disabilities (e.g. mental health, attentional, learning, chronic health, sensory, or physical). Each class/term/semester that a student needs academic adjustments/accommodations, the qualified student is required to work with the Disability Resources and Services Office (DRS) at their individual college(s). College DRS offices may only offer accommodations/academic adjustments for their own college. Contact with the DRS should be made as soon as possible to ensure academic needs are met in a reasonable time. New and returning students must request accommodations each semester through DRS Connect online services. To learn more about this online service process, please contact your local DRS office.

If you have not yet established services through DRS, but have a temporary health condition or permanent disability that requires accommodations, you are welcome to contact DRS by using the information listed on the following webpage: <a href="https://district.maricopa.edu/consumer-information/disability-resources/contacts">https://district.maricopa.edu/consumer-information/disability-resources/contacts</a>. The DRS office offers resources and coordinates reasonable accommodations for students with disabilities and/or temporary health conditions qualifying for accommodations/academic adjustments. Reasonable accommodations are established through an interactive process between you, your faculty, and DRS; and only those academic adjustments/reasonable accommodations granted by the DRS are recognized by the college and MCCCD. It is the policy and practice of the MCCCD to create inclusive and accessible learning environments consistent with federal and state law.

## **Response Time**

Students can expect a response time of 24-48 business hours for the instructor to respond to messages sent via the Canvas Learning Management System or email unless availability is specifically announced to be different within the Canvas Learning Management System. Students can expect assignments to be graded within 7 days of the assignment's due date.

## **Attendance Policy**

Students must participate in this course within the first three (3) days of the start date or they will be withdrawn.

Students who do not participate for two (2) weeks consecutively will be withdrawn for non- attendance.

Participation is defined as follows:

- Participating in discussions/critiques over the course of a due dates.
- Completing exams/quizzes/assignments/projects on or before due dates.
- The syllabus quiz and policy acknowledgement must be completed within the first three days of the course.

Note: Just logging into the Canvas course does NOT count as participation.

## **Instructional Contact Hours (Seat Time)**

This is a two (2) credit-hour course. Plan to spend at least two hours on course content or seat time (direct instruction) and four hours on homework weekly. Accelerated courses will require additional time per week.

## Online Tutoring

SCC's tutors are available online to help with your courses. You may work with an SCC tutor remotely using Google Meet, your phone, or email. Visit the <u>Tutoring & Learning Centers</u> page for detailed information on the five learning center's hours and procedures.

As much as possible, it is highly recommended that you utilize SCC tutors since they are more familiar with SCC coursework, instructor expectations, and assignments; however, if you need to work with a tutor outside regular hours, online and hybrid students now have access to a 24/7 online tutoring service called Brainfuse. Brainfuse provides online tutoring in a variety of academic subjects. Each student may utilize up to 6 hours of online tutoring through Brainfuse per semester, and has the option of requesting additional time if needed.

To access Brainfuse and begin working with a tutor:

- Visit the <u>SCC Online Tutoring Services Through Brainfuse</u> page (https://www.scottsdalecc.edu/students/tutoring/online-tutoring)
- 2. Click the Visit a tutor online button
- 3. Enter your MEID and password
- 4. Choose your topic and subject
- 5. Click the **Connect** button

Please use your time effectively and be prepared with your questions before you connect to a tutor. Tutors and students communicate in real-time so whatever you type, draw, or share on the screen, the tutor sees, and vice versa. You may also want to have screenshots ready if applicable. All Brainfuse sessions are recorded for review later.

## **Learning Tools and Your Privacy and Security**

SCC utilizes a variety of software applications and web-based tools operated by third party vendors to support student learning. To allow student access to the application, site or tool, certain identifiable information may be required to establish a user name or password, and submit work and/or download information from these tools. Inherent with

all internet-based tools, there is a risk that individuals assume when electing to use these tools, as they may place information at risk of disclosure.

To use learning tools responsibly, please observe all laws and the Maricopa Community College District Student Conduct Code, such as copyright infringement, plagiarism, harassment or interference with the underlying technical code of the software. As a student using a learning tool, you have certain rights. Any original work that you produce belongs to you as a matter of copyright law. You also have a right to the privacy of your educational records. Your contributions to learning tools constitute an educational record. By using the tool, and not taking other options available to you in this course equivalent to this assignment that would not be posted publicly on the internet, you consent to the collaborative use of this material as well as to the disclosure of it in this course and potentially for the use of future courses.

Students are responsible for the information contained in this syllabus, the Syllabus page in your Canvas course and the **College Policies & Student Services** page found in the First Steps module of your Canvas course. Students will be notified by the instructor of any changes in course requirements or policies.

# **Additional Information About Special Projects Course**

This course is a Special topics course that will be focusing on utilizing AI effectively as a business or end user by going over the foundations of what AI is and how it works, understanding the limitations and usages of AI, and understanding some of the ethical and privacy concerns regarding AI. We will be focusing on hands on exercises that will help demonstrate on how AI can be used to solve real world problems.

#### **Tentative Course Outline**

Week Start Date	Topic
5/27	Introduction to AI
	Define Artificial Intelligence
	Explain the current status of AI
	<ul> <li>Differentiate between the different types of AI models</li> </ul>
	Construct basic outputs using various AI tools
6/2	Prompt Engineering
	<ul> <li>Identify the key methods to prompting AI</li> </ul>
	Practice utilizing methods to improve AI output
6/9	Limited Week – No New Topics
6/16	Al: Regulatory, Privacy, and Ethical Concerns
	<ul> <li>Identify key privacy and ethical concerns with AI usage and</li> </ul>
	development
	Experiment with finding the limitations of AI
	Determine who owns content created by AI
6/23	Finding and Using the Right AI Tools
	Assess different AI tools and determine which tool will be best for
	the task
	Solve real world problems using AI
6/30	Final Project Week
	Identify the key challenges and impact of AI
	<ul> <li>Develop an Application or Other Tool using Al</li> </ul>

<sup>\*</sup>Please note this is subject to change and all actual due dates and scheduling will be within the Canvas Learning Management System.