Alexander College
YOUR ROAD TO UNIVERSITY STARTS HERE!

CURRICULUM GUIDE: OFFICIAL COURSE OUTLINE

Course Code	SOSC 100	Course Title	Applications of Generative A.I in Society			
Credit Value	3	Departments	Psychology and Social Sciences			
No. of weeks	14	Hrs. per week	*Lecture*	*Tutorial*	*Laboratory*	*Total*
			3	0	1	4
Course Description	This introductory course explores how generative A.I is used across text, images, audio, and data through hands-on projects and group work. Through case studies and exploration of leading A.I tools, students will critically examine how generative A.I is transforming communication and digital storytelling, creativity, and decision-making across domains such as art, sociology, education, politics, economics, and psychology. Students will learn to design practical and creative A.I applications while also discussing strengths and limitations, and reflecting on ethical and societal implications--including issues of misinformation, bias, and accessibility. By the end of the course, students will gain experience using different A.I systems and develop the skills to understand, apply, and evaluate their effects on communication, creativity, research, and society.					
Prerequisite(s)	ENGL 099					

Initial Articulation Targets	*UBC*	*SFU*	*UVic*	*UNBC*	*TRU*
	ARTS, MDIA, PHIL, POLI, and/or SOCI 1XX	CMNS, PHIL, SA, and/or SOCI 1XX	COM, PHIL, and/or SOSC 1XX	CMNS, PHIL, SOCI, and/or UNIV 1XX	CMNS, PHIL, and/or SOCI 1XX
	For updated information on the transferability of this course, please consult the BC Transfer Guide, www.bctransferguide.ca				

Learning Outcomes

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

- Use leading generative A.I tools for text, images, audio, and data
- Explore the transformative role of generative A.I in education and learning environments.
- Design and present creative and practical applications of generative A.I
- Critically evaluate the strengths and limitations of A.I-generated content.
- Identify and reflect on ethical and societal issues such as bias, misinformation, accessibility, and cultural impact.
- Apply A.I methods to interdisciplinary questions in fields such as sociology, politics, economics, art, and psychology.
- Communicate insights about generative A.I

Alexander College
Main Campus 4805 Kingsway, Burnaby, BC V5H 4T6
www.alexandercollege.ca

Content	**Core topics**
	• Introduction to A.I and its History
	  ○ What is A.I? Definitions and History
	  ○ Psychological and Philosophical perspectives: Human vs. machine intelligence
	  ○ Different types of A.I: symbolic, machine learning, deep learning, generative models
	• Human–Machine Interaction
	  ○ How people perceive A.I and A.I-generated products
	  ○ Designing appealing and accessible A.I interactions
	  ○ A.I in customer service (chatbots) and A.I in mental health support
	• Visual A.I Technologies and Ethical considerations
	  ○ A look into Image generation tools
	  ○ A.I-enhanced storytelling
	  ○ Importance of Prompting and strategies
	  ○ Ethical issues: Misinformation, identity, consent, manipulation
	• Audio A.I Technologies and accessibility
	  ○ Basics of pattern recognition and A.I model training
	  ○ Exploring A.I sound and music generation
	  ○ Text-to-speech and speech-to-text systems captioning, alt-text generation, multilingual translation
	  ○ Accessibility and inclusive education through A.I tools
	• A.I for Data Analysis in the Social Sciences
	  ○ A.I in quantitative and qualitative analysis
	  ○ Sociology applications: Social media analysis, misinformation, activism, urban sociology
	  ○ Political Science applications: Election forecasting, policy analysis
	  ○ Economics applications: Consumer behavior, market and trend analysis
	• Critical Reflection on A.I
	  ○ Algorithmic bias (gender, ethnicity, socioeconomic class)
	  ○ A.I hallucinations and fact-checking
	  ○ Future directions and broader implications for research, society, and policy
	
	Additional topics may also be covered, at the discretion of the instructor.

Methods of Instruction	• Lectures • Group projects and collaborative design activities • Tool demonstrations and hands-on activities • Case studies and real-world applications • Critical discussions and debates on ethics, bias, and social impact • Readings and multimedia resources • Presentations • Exams
Methods of Delivery	Indicate how the course is delivered: ☒ In-class instruction ☐ Distance education (☐ Synchronous, ☐ Asynchronous or ☐ Both) ☒ Combined delivery (both in-class and distance) Distance component is (☐ Synchronous, ☐ Asynchronous or ☒ Both)

<table>
<tr><td>Required Textbook(s)</td><td colspan="2">A customized reading package will ensure the currency and relevancy of course readings. Sample readings appear below:

Introduction to A.I and its History
Xu, Y., et al. (2021). Artificial intelligence: A powerful paradigm for scientific research. Innovation (Cambridge (Mass.), 2(4), 100179. https://doi.org/10.1016/j.xinn.2021.100179

Human–Machine Interaction
San Buenaventura, S. H.A. (2025). AI and people: A review of current research on human–machine interaction. World Journal of Advanced Research and Reviews, 26(3), 2707–2715. https://doi.org/10.30574/wjarr.2025.26.3.2486

Visual A.I Technologies and Ethical considerations
Bellaby, R. (2024). The ethical problems of ‘intelligence–AI’. International Affairs, 100(6), 2525-2542.

A.I for Data Analysis in the Social Sciences
Zhao, J., Wu, M., Zhou, L., Wang, X., & Jia, J. (2022). Cognitive psychology-based artificial intelligence review. Frontiers in neuroscience, 16, 1024316. https://doi.org/10.3389/fnins.2022.1024316.

A.I for Data Analysis in the Social Sciences
Qian, Y., Siau, K. L., & Nah, F. F. (2024). Societal impacts of artificial intelligence: Ethical, legal, and governance issues. Societal impacts, 3, 100040.</td></tr>
<tr><td>Homework Hours</td><td colspan="2">At minimum, students can expect one hour of homework for every two hours of instructional time.</td></tr>
<tr><td rowspan="8">Evaluation</td><td>Component</td><td>% Value</td></tr>
<tr><td>Assignments</td><td>15-20%</td></tr>
<tr><td>Lab work</td><td>15-20%</td></tr>
<tr><td>Presentations</td><td>5-10%</td></tr>
<tr><td>Participation/In-class-activities</td><td>5-10%</td></tr>
<tr><td>Midterm examination</td><td>20-30%</td></tr>
<tr><td>Final examination</td><td>20-30%</td></tr>
<tr><td>Completion Requirements</td><td colspan="2">Successful completion of this course requires a minimum grade of 50% (D) or higher. A grade of 55% (C-) or higher is required for this course to function as a prerequisite. Note that all students require their own laptop to complete this course. Consult instructor syllabus for additional completion requirements.</td></tr>
</table>