

Course Title	LAI107 Fundamentals of Information Science 1	Instructor(s)	Melody Mugerza
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Class Style	Lecture	Office Hours	
Track	N/A	Mode of Instruction	
Credits	2	Allocated Year	Spring 2026
Active Learning	<p>Category 2-(3): Presentations</p> <p>2-(5): Surveys and Interviews</p> <p>Category 4-(1): Interactive Lectures</p>	Compulsory or Elective	Compulsory
Course Overview	<p><i>Considers the expanding role of information systems in modern society and the computer as a problem solving and information management tool. Introduces computer applications in the humanities and the social sciences and the skills necessary to access global information networks.</i></p>		
Course Objectives	<p>General Learning Objectives</p> <p>We live in an age of information and computer processing of information. Educated people today need to use computers. We also need to understand what computers are and how they affect our lives. In this course, you will learn how you can use information technology effectively and responsibly. Specifically, you will:</p> <ul style="list-style-type: none"> • become more aware of current issues related to the environment • acquire new skills for finding, organizing and presenting information using various computer application • improve your skills in English listening, speaking, reading, and writing • basic moral values when using ICT in everyday life. <p>Computer Skills Objectives</p> <p>The course seeks to develop basic to intermediate skills in the following areas:</p> <ul style="list-style-type: none"> • File management • Using and managing e-mail • Finding information on the Internet • Word-processing • Charting and data analysis • Presentation skills <p>English Skills Objectives</p> <p>As you work on computer skills and understanding the information environment, you will be improving your English skills in the following areas:</p> <ul style="list-style-type: none"> • Reading skills of skimming (reading quickly for the main ideas) and scanning (reading for specific information), and careful understanding of short texts. • Speaking with short oral presentations and daily classroom activities • Listening to presentations made by classmates and teachers • Conversation in daily classroom activities • Writing a well-developed short research project • Building general academic and information technology related vocabulary <p>Data Science Objectives</p> <p>This course introduces many concepts of data science that aim at preparing students for the future:</p>		

	<ul style="list-style-type: none"> • Learning that mathematics, data science, and AI education are deeply contributing to the current information society and are closely linked to daily life. • Understanding that data used in society can be a useful tool for solving daily life and social issues. • Learning how to utilize data about distribution, manufacturing, finance, services, etc. • Understanding about protection of personal information, information ethics, etc. • Learning basic methods for utilizing of "reading, explaining, and handling data" using actual examples in society <p>SDGs Objectives</p> <p>This course explicitly connects its content to the Sustainable Development Goals. Students will develop a final project with a topic of their choice and will connect it to at least one of the SDGs.</p>
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Prerequisite	
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	No	Contents	Topics/Activities
	1	Introduction to Information Science & Final Project	<p>Topics</p> <ul style="list-style-type: none"> • Course overview and expectations • Introduction to information science • Final project explanation • Brainstorm research topics <p>Homework</p> <ul style="list-style-type: none"> • Propose 3 research questions
	2	Email Communication & Google Drive	<p>Topics</p> <ul style="list-style-type: none"> • Professional email writing • Email attachments and file naming • Google Drive storage and sharing <p>Activity</p> <ul style="list-style-type: none"> • Send email with correctly named file • Create personal course folder
	3	Typing	<ul style="list-style-type: none"> • Introduction to typing • Typing Practice <ul style="list-style-type: none"> -Handout: "Emergency ..." -Handout: "Harry Potter ..." • Explain the Typing Practice Results (handout)
	4	Word Processing Basics	<ul style="list-style-type: none"> • Activity 1: Vocabulary • Activity 2: Keyboard Shortcuts • Activity 3: Word Hunt

	5	Advanced Word for Academic Reports	<p>Topics</p> <ul style="list-style-type: none"> Working with images and tables in MS Word MS Word advanced features: <ul style="list-style-type: none"> Headers ToC image and table captions
	6		<p>MS Word advanced features:</p> <ul style="list-style-type: none"> Styles Breaks <p>Document formatting Activity (Format a short academic document)</p>
	7	Spreadsheets Basics	<ul style="list-style-type: none"> Introduction to spreadsheet applications Vocabulary Data Entry (fill handle and data types) Data Types <p>Activity</p> <ul style="list-style-type: none"> Enter survey data
	8	Spreadsheet Calculations	<p>Topics</p> <ul style="list-style-type: none"> Formulas Percentage Cell references Charts and charting concepts <p>Activity</p> <ul style="list-style-type: none"> Analyze simple dataset
	9	MIDTERM EXAMS	<p>The midterm evaluates:</p> <ul style="list-style-type: none"> basic information science knowledge email communication Word formatting spreadsheet basics information ethics
	10	Data Visualization	<p>Topics</p> <ul style="list-style-type: none"> Charts and graphs Choosing the right chart Describing data <p>Activity</p> <ul style="list-style-type: none"> Activity: Car color counting <p>Homework Assignment</p> <ul style="list-style-type: none"> Create graphs (Car Data) <p>Make a car data report</p>

	11	Surveys Design, Information Ethics & Academic Honesty	<p>Topics</p> <ul style="list-style-type: none"> • Survey question types • Avoiding biased questions • Plagiarism and citation • Responsible use of data • Privacy in surveys <p>Activities</p> <ul style="list-style-type: none"> • Identify plagiarism examples • Draft questionnaire for Final Project <p>Homework Assignment:</p> <ul style="list-style-type: none"> • Interview classmates using the survey questionnaires you made in class.
	12	Data Collection & Data Entry	<p>Topics</p> <ul style="list-style-type: none"> • Conduct survey • Enter responses into spreadsheet <p>Activity</p> <ul style="list-style-type: none"> • Clean and organize data <p>Homework Assignment:</p> <ul style="list-style-type: none"> • Enter data from your Final Project survey questionnaire in a spreadsheet. • Create graphs for your Final Project based on your questionnaire survey.
	13	Data Analysis & Writing Results	<p>Topics</p> <ul style="list-style-type: none"> • Interpreting graphs • Writing results section <p>Activity</p> <ul style="list-style-type: none"> • Write results paragraph <p>Homework Assignment:</p> <ul style="list-style-type: none"> • Analyze graphs for your Final Project • Interpret your graphs and start writing your Final Project on a Word document (Title, Introduction, Results and Discussion, References)
	14	Presentation Design & Recording	<p>Topics</p> <ul style="list-style-type: none"> • PPT structure • Visualizing data • Recording presentations <p>Activity</p> <ul style="list-style-type: none"> • Create presentation slides

		Homework Assignments: <ul style="list-style-type: none"> • Finish writing your Final Project on Word document (1000+ words) • Make at least 8–10 slides for your PPT Video Presentation
	15	Finishing of Final Project <ul style="list-style-type: none"> • In-Class Activity: Input notes in PPT slides • Start Recording and Submitting PPT Video for your Final Project
	16	Final Exams Week <p>Students submit:</p> <ol style="list-style-type: none"> 1. Final Project (mini-research) on a Word document (1000+ words) 2. Final Project for a PPT video presentation (5–7 minutes)
Grading	<p>You will be graded on quizzes, assignments and projects, class attendance and participation, and individual effort. The weights given to them will be as follows:</p> <ul style="list-style-type: none"> • Homework 25% • Participation 10 • Midterm Exam (content & language) 25% • Final Project 40% <p>You will receive a mid-semester evaluation to let you know how you have been doing up to that point.</p>	
Textbooks	Introduction to Information and Communication Technology (Handout) By: Anderson Passos, http://lab.passos.jp	
References	n/a	
NOTES	<p><i>To make sure students remember class contents, we will use classroom response systems sometimes. Usually, review will be conducted at the beginning of a class and hopefully we can have some discussion during it. No special hardware is required because we will be using the computers available in the computer lab. In case you want to use your own computer, tablet or smartphone, there is no problem.</i></p> <p>Student Responsibilities As a class member, you are responsible for attending all classes and arriving on time, for participating as a member of a group, and for completing and handing in all assigned work.</p> <p>Attendance and Lateness</p> <ul style="list-style-type: none"> • You can be absent a maximum of 5 times. • If you are more than 30 minutes late, you will be given an absence • Two lateness are equal to one absence. <p>If you sum up more than 5 absences (e.g., 4 absences and 3 lateness), you will have to withdraw from the course. Failing to do so will result in an automatic “F” grade.</p>	

Homework

The homework should be handed in at the beginning of every class. All homework submitted after that will not be considered.

Excused Absences

Whenever possible, plan in advance and ask the instructors for the material of the class you are going to be absent. Homework and project deadlines will not be changed nor postponed, so plan ahead of time if you have to be absent for a class. Exceptional cases exist, so be sure to talk to the instructor if you have any questions/doubts.

Late Assignments

It is your responsibility to look for the instructors and check what assignments are due.

Also, if you miss a class, it is your responsibility to contact the instructors to get handouts and explanations (missing a class is no excuse for not handing in homework).

Plagiarism and Intellectual Honesty

Plagiarism is representing someone else's intellectual property, words, ideas, or images, as your own. It is a very serious academic offense and plagiarized work is not accepted in this course. Ask one of the instructors if you have any questions about this. You are responsible for understanding what plagiarism is and knowing how to avoid it in your work.