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Instructor: Dr. Lingxiao Wang

Lecture room: IESB 218

Lecture hours: 8:00 am – 9:50 am Tuesday and Thursday

Email: lwang@latech.edu

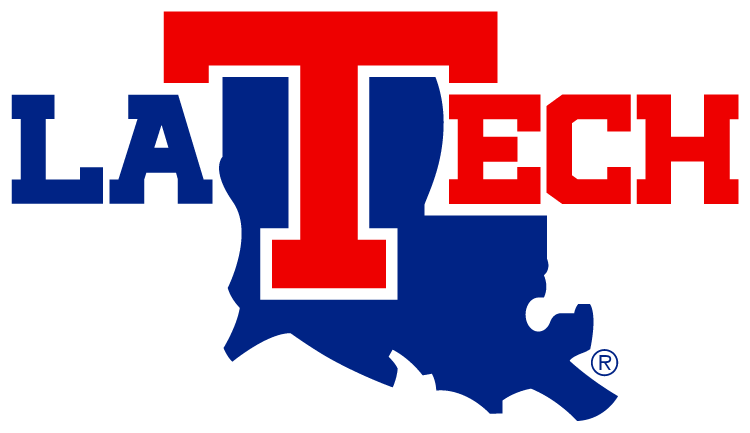
Office: NETH 213

Office hours: 2:00 pm – 4:00 pm Monday to Friday

new

**ELEN 451 – Hands-on Artificial Intelligence and Robotics**

**Fall 2023**



**Course Description:**

1. Introduction to basics in artificial intelligence (AI) and robotics
2. Teach hands-on projects on AI and robotics applications
3. Introduction to cutting-edge AI methods and applications

**Textbook: No Textbook required.** Teaching materials are based on lectures.

**Recommended Software:** Google Colab (no installation is needed. Online Python programming tool).

**Tentative Course Schedule:** Please see Moodle for the course schedule

**Homework:**

1. Homework will be submissions of code and results from the course projects.
2. All submissions are online.

**Exams:**

1. Take-home exams only
2. Four exams in the format of multi-selection questions

**Grading:** The weighting of grades is as follows:

* Homework – 40%
* Exam 1 – 15%
* Exam 2 – 15%
* Exam 3 – 15%
* Exam 4 – 15%

**Grading Scale:** The grading scale used for this course is shown below:

* A ­– 100-90%
* B – 89.99-80%
* C – 79.99-70%
* D – 69.99-60%
* F – below 60%

**Class Attendance:** This class will adhere to the guidelines for class attendance found in Chapter 3 of the University Catalog, available online at [www.latech.edu/registrar/bulletin/](http://www.latech.edu/registrar/bulletin/). Additionally, attendance will be taken promptly at the beginning of class and any student arriving after attendance has been checked without a reasonable excuse will be considered absent. Reasonable excuses DO NOT include routine doctor visits, car trouble, parking difficulties, oversleeping, or work schedules. Any student who misses three or more classes without university approved excuses may be penalized at the instructor’s discretion.

**Emergency Class Disruption Policy:** In the event that a disaster or other emergency results in campus closure, this course will continue via Moodle and Zoom. You will be required to login to [moodle.latech.edu](file:///C:\Users\Matthew%20Hartmann\Dropbox\ENGR%20221%20-%20Electrical%20Engineering%20and%20Circuits%20I\221%20-%20Fall%202021\moodle.latech.edu) for further instructions. Please enroll in the Emergency Notification System (instructions below) to receive official campus updates. You may also refer to [ert.latech.edu](file:///C:\Users\Matthew%20Hartmann\Dropbox\ENGR%20221%20-%20Electrical%20Engineering%20and%20Circuits%20I\221%20-%20Fall%202021\ert.latech.edu) for updated information.

**Disability Disclosure**: Students needing testing or classroom accommodations based on a disability are encouraged to discuss those needs with the instructors as soon as possible. For more information about eligibility for accommodations, contact the Department of Testing and Disability Services, 318-257-4221, [www.latech.edu/ods](http://www.latech.edu/ods) for assistance.

**Academic Misconduct:** Academic behavior is governed by university policies and guidelines found in Chapter 4 of the University Bulletin. It is the student’s obligation to be familiar with and understand these policies, regulations, and guidelines.

* Behavior: Students are expected to maintain a professional classroom environment. Students are to refrain from: verbal or physical violence, threats, improper language, disrespect to classmates and the instructor. Participants of such activities will be asked to leave the class. If you are removed from class for behavioral reasons, you will be considered absent for that class period.
* Cheating: Cheating of any kind will not be tolerated. Collusion during examinations through verbal or electronic communication and/or plagiarism of any kind throughout the course will result in a zero grade for the assignment or exam as well as notification of the proper university officials. Multiple infractions will result in a zero grade for the course.

**Emergency Notification System:** All Louisiana Tech students are strongly encouraged to enroll and update their contact information in the Emergency Notification System. It takes just a few seconds to ensure that you are able to receive important text and voice alerts in the event of a campus emergency. For more information on the Emergency Notification System, please visit [www.latech.edu/administration.ens.shtml](http://www.latech.edu/administration.ens.shtml).

**COVID -19 Information:** Students can access COVID-19 related information, guidelines, FAQs, and policies at Louisiana Tech’s website: [www.latech.edu/coronavirus](file:///C:\Users\Matthew%20Hartmann\Dropbox\ENGR%20221%20-%20Electrical%20Engineering%20and%20Circuits%20I\221%20-%20Fall%202021\www.latech.edu\coronavirus).

Louisiana Tech’s Return to Campus Plan is located at [www.latech.edu/return-to-campus](file:///C:\Users\Matthew%20Hartmann\Dropbox\ENGR%20221%20-%20Electrical%20Engineering%20and%20Circuits%20I\221%20-%20Fall%202021\www.latech.edu\return-to-campus). Masks are required to be worn indoors on campus. Masks are required to be worn outdoors if six feet of physical distance cannot be maintained. Every member of the Tech Family will need to take personal responsibility for their behavior, which includes wearing masks, maintaining physical distancing, washing hands regularly, using proper sneeze and cough practices, helping maintain clean academic and office areas, and monitoring for symptoms of COVID-19.

The direct link to the reporting protocol for students is located at [www.latech.edu/return-to-campus-plan/for-students/](file:///C:\Users\Matthew%20Hartmann\Dropbox\ENGR%20221%20-%20Electrical%20Engineering%20and%20Circuits%20I\221%20-%20Fall%202021\www.latech.edu\return-to-campus-plan\for-students\). Students can reach out to Stacy Gilbert, Dean of Student Services & Academic Support, at [stacyc@latech.edu](mailto:stacyc@latech.edu) for help with accommodations and additional information.

Failure to comply with Safety Protocols listed in the “Back to Campus Fall 2020” booklet, located at [www.latech.edu/documents/2020/07/covid-return-book.pdf/](http://www.latech.edu/documents/2020/07/covid-return-book.pdf/), specifically on pages 5-7 about masks and social distancing, could result in students being in violation of the Classroom Behavior Policy listed on page 125 of the “Student Handbook,” located at [www.latech.edu/documents/2018/09/student-handbook.pdf/](file:///C:\Users\Matthew%20Hartmann\Dropbox\ENGR%20221%20-%20Electrical%20Engineering%20and%20Circuits%20I\221%20-%20Fall%202021\www.latech.edu\documents\2018\09\student-handbook.pdf\).

Information and contact numbers and sites for Louisiana Tech Counseling Services are located at <https://www.latech.edu/current-students/student-advancement-affairs/counseling-services/>.