

CSCE 100
Introduction to
Informatics
Fall 2020
Professor Leen-Kiat Soh

Syllabus

General Info

Instructor	Professor Leen-Kiat Soh
Phone	402-472-6738
E-mail	lksoh@cse.unl.edu
Lecture	11:00 AM – 12:15 PM TR
Room	112 Avery Hall
Zoom Office Hours	1:00 – 2:00 PM TR (or by appointment)
Zoom	https://unl.zoom.us/my/lksoh

Undergraduate Teaching Assistants

- TBA

Course Catalog

Introduction to the use of **data-centric** and **information technologies**—and issues and challenges—in today's **applications** in sciences, engineering, the humanities, and the arts.

Exposure to

- **computational thinking and programming**
- **statistical thinking and research design**
- **data analysis and database techniques**
- **visualization and creative thinking**

The Informatics Minor

- An interdisciplinary program that prepares students with **core computational skill sets and competencies** that allow them to **solve problems** within their chosen discipline or field. The program also builds **interdisciplinary problem solving skills** that are applicable and advantageous across academia and within industry
 - Apply **computational thinking** to solve problems effectively and implement it using a programming language;
 - Apply **statistical techniques** to assess outcomes of empirical studies or experiments, and set up research designs to evaluate tools, techniques or hypotheses effectively;
 - Interact, use and manage data or **databases** and solve data-centric problems; or organize, **visualize**, and communicate digital data effectively and efficiently; or use **creative competencies** to generate creative solutions; and
 - Contribute one's expertise to the solution of **interdisciplinary** problems by effectively collaborating and communicating with those from other disciplines.

Course Goal

- Introduce you to the major areas of informatics and to give you a taste of how each area could be used in your academic discipline
 - Including computational thinking, CS concepts, and programming
- Give you entry level experience with a range of topics, and to spark ideas of how these tools might fit into your studies
- Hear from practitioners on campus throughout the semester

Texts

All reading materials will be online, freely available and assigned during the semester

Programming Assignments – 30%

3-5 programming assignments based on **Python** that deals with data processing and informatics

Designed for students to practice and apply their problem solving skills to solve problems in informatics as well as programming skills

In-Class Quizzes – 25%

Numerous in-class quizzes administered online via Canvas across the semester

No make-up quizzes

Mid-Term Exam(s) – 10%

1-2 mid-term exams in class

Include open-ended questions to assess student understanding of the materials in class

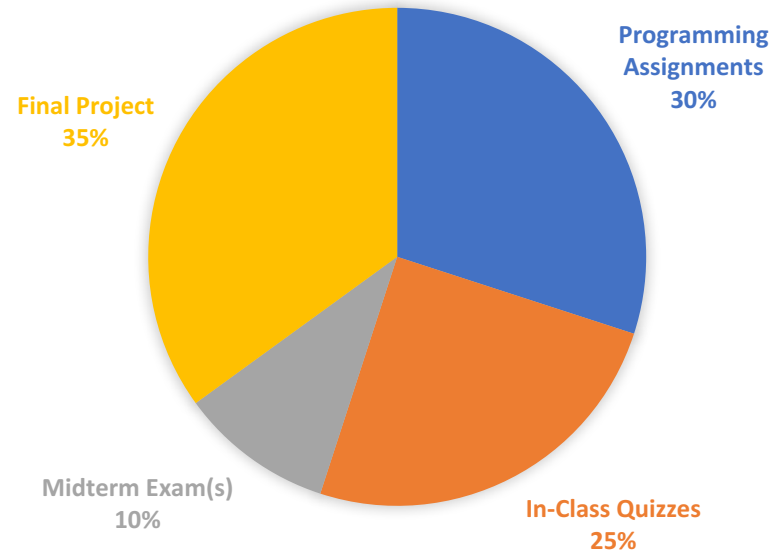
Final Project (Group) – 35%

A group-based final project (3-4 members per group).

Will involve working with real data, perform data processing and data analysis on the data, discuss and present (visualize) the analysis effectively, document and report on the overall project, and present the work towards the end of the semester

Course Grade

COURSE GRADE DISTRIBUTION



A+: ≥ 97

A: ≥ 93 & < 97

A-: ≥ 90 & < 93

B+: ≥ 87 & < 90

B: ≥ 83 & < 87

B-: ≥ 80 & < 83

C+: ≥ 77 & < 80

C: ≥ 73 & < 77

C-: ≥ 70 & < 73

D+: ≥ 67 & < 70

D: ≥ 63 & < 67

D-: ≥ 60 & < 63

F: < 60

Services for Students with Disabilities

The University strives to make all learning experiences as accessible as possible. If you anticipate or experience barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can discuss options privately. To establish reasonable accommodations, I may request that you register with **Services for Students with Disabilities (SSD)**. If you are eligible for services and register with their office, make arrangements with me as soon as possible to discuss your accommodations so they can be implemented in a timely manner. **SSD contact information: 232 Canfield Admin. Bldg.; 402-472-3787; acontreras3@unl.edu.**

Academic Integrity Policy

Violations of academic integrity will result in automatic failure of the class and referral to the proper university officials. The work a student submits in a class is expected to be the student's own work and must be work completed for that particular class and assignment. Students wishing to build on an old project or work on a similar topic in two classes must discuss this with both professors. Academic dishonesty includes: handing in another's work or part of another's work as your own, turning in one of your old papers for a current class, or turning in the same or similar paper for two different classes. Using notes or other study aids or otherwise obtaining another's answers for an examination also represents a breach of academic integrity. Those who share their code and those who copy other's code will be penalized in the same way; both parties will be considered to have plagiarized. **Sanctions are applied whether the violation was intentional or not. Academic dishonesty of any kind will be dealt with in a manner consistent with the CSE Department's Policy on Academic Integrity (http://cse.unl.edu/undergrads/academic_integrity.php).** You are expected to know and abide by this policy.

To help avoid these problems, please start assignments early and seek help when you need it.

Face Coverings Syllabus Statement

As of July 17, 2020 and until further notice, all University of Nebraska–Lincoln (UNL) faculty, staff, students, and visitors (including contractors, service providers, and others) are required to use a facial covering at all times when indoors except under specific conditions outlined in the COVID 19 face covering policy found at: <https://covid19.unl.edu/face-covering-policy>. This statement is meant to clarify classroom policies for face coverings:

To protect the health and well-being of the University and wider community, UNL has implemented a policy requiring all people, including students, faculty, and staff, to wear a face covering that covers the mouth and nose while on campus. The classroom is a community, and as a community, we seek to maintain the health and safety of all members by wearing face coverings when in the classroom. Failure to comply with this policy is interpreted as a disruption of the classroom and may be a violation of UNL's **Student Code of Conduct**.

Individuals who have health or medical reasons for not wearing face coverings should work with the Office of Services for Students with Disabilities (for students) or the Office of Faculty/Staff Disability Services (for faculty and staff) to establish accommodations to address the health concern. Students who prefer not to wear a face covering should work with their advisor to arrange a fully online course schedule that does not require their presence on campus.

Face Coverings Syllabus Statement, Cont'd

Students in the classroom:

1. If a student is not properly wearing a face covering, the instructor will remind the student of the policy and ask them to comply with it.
2. If the student will not comply with the face covering policy, the instructor will ask the student to leave the classroom, and the student may only return when they are properly wearing a face covering.
3. If the student refuses to properly wear a face covering or leave the classroom, the instructor will dismiss the class and will report the student to Student Conduct & Community Standards for misconduct, where the student will be subject to disciplinary action.

Face Coverings Syllabus Statement, Cont'd

Instructors in the classroom:

1. If an instructor is not properly wearing a face covering, students will remind the instructor of the policy and ask them to comply with it.
2. If an instructor will not properly wear a face covering, students may leave the classroom and should report the misconduct to the department chair or via the TIPS system for disciplinary action through faculty governance processes.