**Freshman Orientation to Computer Science and Engineering**

**CSCE 10 – Pass/No Pass Only – 0 Credit Hours**

**Fall 2014 (updated 10/25/2014)**

**Instructor**

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For calendar go to <http://cse.unl.edu/~riedesel> and follow link to appointments; drop in or email for confirmation of meeting time

**Teaching Assistant**

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**Course Materials**

Syllabus and other materials will be posted at either <http://cse.unl.edu/~riedesel/pub/cse10> or

on Piazza - <https://piazza.com/class/hz9ztl80wuh72v>

**Catalog Description**

CSCE 10 - *Introduction to CSE:*Optional *(it has just been made a required course!)* pass/no pass course designed to help incoming first-year CSE students in their transition into the University of Nebraska-Lincoln and the Computer Science and Engineering department. The course introduces various departmental resources and policies, explore possible career paths, fields, and opportunities available to a computer scientist or computer engineer. Assignments may include attending department orientations and lectures, a student organization meeting, and on-campus activities including Career Fair, E-Week, and Research Fair.

**Course Organization**

Class will be held weekly from 5:30-6:20pm on Wednesdays and Thursdays for most of the semester. An expected 200 students will be enrolled, approximately split between the two days. The room, Avery 115, is quite large and the sections will be handled the same, so students are welcome to switch back and forth. Attendance rosters will be handed around the room during each session.

This is not a typical lecture course. No text is required. Activities will be experiential in nature and include tours, interviews, etc. Class sessions will include guest speakers and panels, especially panels of students who will share with you their experiences at UNL, in organizations, work, research, etc. These sessions will be informal and interactive.

**Grading**

There will be no exams and no final exam. There will be activities that involve attendance at events outside the regular class time. In order to pass, students must accumulate sufficient points in three different categories:

1. *Attendance:* Attendance is worth 1 point for each session – a minimum of 8 points must be earned. Earn a point by coming to class and signing in at the beginning. If the choice is then to not pay attention or to leave, you may leave without penalty.
2. *Foundation:* Foundation Activities are worth 1 point each – At least 7 points must be earned.
3. *Broadening:* Broadening Activities are worth 1 point each – At least 5 points must be earned.

Moreover, a minimum total of 25 points overall must be earned. Some activities are graded on a scale of 1-100. A grade of at least 75 must be attained in order to earn the point for such an activity. Essays are expected to be one to two pages and will be evaluated on the basis of quality of thinking. Reports may be one to three pages on average. No fancy formatting is needed – a simple Word document or posting of an email is fine.

For activities that involve handing in reports, submission will be electronic with deadlines set to the middle of “dead week”. Some may be resubmitted for a higher grade, but only if they are submitted before Thanksgiving Break. Details will be provided later.

**Schedule**

Some sessions will be scheduled around availability of guest speakers and timing of special events such as the Fall Career Fair, the local ACM Programming Contest, and Priority Registration for spring semester. These may require modifications to the preliminary schedule.

**Important Dates**

* *First Sessions:* Wednesday and Thursday August 27 and 28
* *Engineering Involvement Fair:* Tuesday September 2, 4:30 pm – 7:30 pm in the Othmer Hall lobby
* *Education Abroad Fair:* Tuesday September 23, 11:00 am – 2:00 pm, Nebraska Union; *also 3:00 pm – 4:30 pm, Othmer Hall especially for Engineering (including Computer Science)*
* *Fall Career Fair:*Tuesday September 30, 10:00 am – 3:00 pm (everyone attends at least a portion)
* *Priority Registration for Spring:* Monday October 27 – Tuesday November 11, freshmen will have Friday November 7 – Tuesday November 11.

**Academic Integrity Policy**

Everyone in the Department is expected to understand and abide by our policy. This will be a topic of discussion very early in the course. See <http://cse.unl.edu/ugrad/resources/academic_integrity.php> for the document.

**Students with Disabilities**

Students with disabilities are encouraged to contact the instructor for a confidential discussion of their individual needs for academic accommodation. It is the policy of the University of Nebraska-Lincoln to provide flexible and individualized accommodation to students with documented disabilities that may affect their ability to fully participate in course activities or to meet course requirements. To receive accommodation services, students must be registered with the Services for Students with Disabilities (SSD) office, 132 Canfield Administration, 472-3787 voice or TTY

**Class Sessions** *(not necessarily in order – attend at least 8)*

1. *Introductions* – Research Faculty, Food **(August 24/25)**
2. *Tours* – Tours of research facilities spread over several days including regular class time **(September 3-5)**
3. *Careers* – Career Services representative to discuss preparing for the Fall Career Fair **(September 10/11)**
4. *Internships* – Student Panel to share experiences in finding internships **(September 17/18)**
5. *Employment* – Employer Panel to discuss preparation for internships and eventual employment **(September 24/25)**
6. *Managing the Academics* – Student Panel to discuss work load, study skills, finding resources, group work, informal education opportunities **(October 1/2)**
7. *Student Organizations* – Panel of student organization leaders discuss activities, reasons for involvement **(October 8/9)**
8. *Our Curriculum* – Panel to discuss why we include Software Engineering, Computer Organization, Theory, Communication Skills, the Liberal Arts, etc. **(October 15/16)**
9. *Midterm Evaluations* – Course evaluation, on paper and interactive **(October 22/23)**
10. *Priority Registration Advising* – Planning for Spring and the rest of the four years, tools and resources **(October 29/30)**
11. *Undergraduate Research* – Student Panel to discuss involvement in UCARE, working in our research labs, and relevance to graduate studies **(November 5/6)**
12. *Computing across Globe* – Panel to discuss Study Abroad opportunities **(November 12/13)**
13. *Diversity* – Panel to discuss the department’s top priority and what students can do **(November 19/20)**
14. *Involvement* – Panel to discuss becoming an Undergraduate TA (UTA), independent learning, entrepreneurship, faculty committees, etc. **(December 3/4)**
15. *Debriefings and Course Assessment* – Discussion, pizza **(December 10/11)**

**Foundation Activities** (do at least 7)

1. *Write an essay*: “What the Department’s Academic Integrity Policy Means to Me”. The policy is fairly lengthy in order to cover many complexities, nuances, and rationales. Throughout your time here, it will be assumed that you understand the policy.
2. Learn a computing technology outside the regular classroom – *Report on what and how you learned*. This could be picking up SQL using MySQL, JavaScript, LaTeX text formatting, using a game engine, programming Arduinos, etc. Your report will likely include an example or a URL to what you have done. Being able to learn things on your own and having the drive to do it is invaluable for obtaining good jobs.
3. Visit with at least 3 employers at the Fall Career Fair – *Report on your findings.* Starting now while you are freshmen is highly advised. Do it BEFORE you have to.
4. Join tours of three research labs in the department *(attendance taken)*. Discover some of the really neat research you can get involved in.
5. *Prepare a weekly work schedule* and follow it. Some student benefit greatly by having a schedule lain out. Admittedly, some do fine without! If this describes you, check with the instructor for possible alternatives.
6. *Develop a four-year plan of studies*. Having some idea of what you will be doing can help guide you with priorities and scheduling. Think through possible minors, internships, study abroad, availability of technical electives, etc.
7. *Prepare a resume* and *statement of purpose.* Why are you here? What have you done? Where do you hope to go? What do you really want to accomplish in life?
8. Visit with an advisor to plan for spring semester *(Sign in when you come in for priority registration advising)*. Even if you think you know exactly what is coming up for you, do check in – there may be opportunities and implications you have not thought of!
9. Attend the Engineering Involvement Fair and *report on it*. As advised by employers, internship students, and faculty alike, getting involved and networking is can open many doors.

**Broadening Activities** (do at least 5)

1. Get involved in a student organization or program – *Report on it*.
2. Collaborate with a team of students on a non-class, computing-related project – *Document it*.
3. Pick an application area for computing – *Report on it*.
4. Complete a computing course project that goes beyond the minimum requirements – *Submit documentation*.
5. *Write an essay*: “How Can I Use Computing to Improve My World”.
6. Pick an area of research and Interview a researcher – *Report on it*.
7. Practice and compete in the local ACM Programming Contest – *attendance taken*.
8. Take a tour of the facilities of one of our employing companies – *Report on it*.
9. Contribute something that increases the sense of welcoming inclusiveness for the diverse set of students engaged in computing – *Report on it*. (This is very open-ended, on purpose. Just start thinking about this and watch for opportunities!)
10. Attend the UNL or Engineering Education Abroad Fair – *Report on it*. **(Tuesday, September 23)**

**Other Items:**

* The CSE Department has an anonymous contact form that you may use to voice your concerns about any problems in the course or department if you do not wish to be identified. See <http://cse.unl.edu/contact-form>.
* It is CSE Department policy that all students in CSE courses are expected to regularly check their email so they do not miss important announcements.
* TA office hours are in the Student Resource Center (SRC) which is at Avery 13A. See <http://cse.unl.edu/src>
* This syllabus may be updated and expanded as the semester progresses.