

MSE492 / CHEM494 – Lab Safety Fundamentals

Fall 2023

Course Description:

The primary goals of the course are to 1) introduce basic concepts in laboratory safety, 2) increase awareness of safety issues in research labs and lab courses and 3) provide basic knowledge in dealing with simple lab safety problems. Information will be provided via in-person lectures. Course evaluation will consist of successful completion of in-class quizzes and Division of Research Safety (DRS) online training modules as well as an in-person fire extinguisher training.

Drops/Withdrawals:

Please note that MSE492 / CHEM494 has a scheduled duration of approximately 2.5 weeks during the semester and is thus considered a nonstandard class. As such, it has different rules for drop deadlines and refund percentages. Specific information about this matter can be found at <https://registrar.illinois.edu/tuition-fees/refunds/>.

Instructor:

Dr. Nathan Gabrielson
Phone: 217-300-3906
Email: gabrilns@illinois.edu
Office: 209 Ceramics

Course Text:

There is no required textbook for the class. Copies of lectures will be provided as electronic resources on the course website.

Website:

<https://canvas.illinois.edu>

Meetings and Topics:

Class meets Mondays and Wednesdays in 100 Noyes Laboratory from Wednesday, September 7 through Wednesday, September 21. Although the class is scheduled from 7:00PM-8:50PM, we will likely end sooner than that. In addition, an in-person fire extinguisher training will be conducted once during the course. Students are expected to attend the training at a time that fits their schedule. Lecture topics and fire extinguisher training will follow the schedule shown below:

Class Meetings:

Date	Lecture Topic
Wednesday, September 6	General Laboratory Safety
Monday, September 11	Risk Assessment
Wednesday, September 13	Chemical Safety
Monday, September 18	Biological Safety
Wednesday, September 20	Laser Safety

In-Person Fire Extinguisher Training:

(U of I Campus Fire Station, 1105 W. Gregory Dr., Urbana, IL)

Date	Time
TBA	TBA

Sign up at TBA

Grading/Evaluation:

MSE492 / CHEM494 is graded on a Satisfactory (S) / Unsatisfactory (U) scale. In order to receive a Satisfactory score, it is necessary to 1) attend class and successfully complete the in-class quizzes, 2) complete the required online training modules offered through the Division of Research Safety (DRS), 3) upload the DRS completion certificates to the course website, and 4) complete the in-person fire extinguisher training.

In-Class Quizzes

Multiple choice quizzes covering the lecture topics will be given at each class and are intended to serve as a check that the lecture material is understood. Quizzes will be given at the start of class and are due at the end.

DRS Training Modules

Visit <https://drs.illinois.edu/> and select the "Training" menu to access the training material. After finishing the required training modules, submit the certificate at the class website (<https://canvas.illinois.edu>) as proof of completion. If training has been completed prior to MSE492 / CHEM494, you may upload your existing, valid certificate as proof.

Training Module	Due Date
Laboratory Safety	Sunday, September 10 @ 11:59PM
Risk Assessment for Research Procedures	Sunday, September 17 @ 11:59PM
Chemical Safety: An Introduction	Sunday, September 17 @ 11:59PM
Understanding Biosafety	Sunday, September 24 @ 11:59PM
Laser Safety	Sunday, September 24 @ 11:59PM

Other:

https://emails.illinois.edu/files/2056962258/gcoe_syllabusstatement_artf.pdf