

CHBE 6003 Syllabus

Chemical Process Safety, Section A, 1 credit hour

Fall 2026

Instructor Information

Instructor: Sankar Nair

General Course Information

Description

The course focuses on safety culture and risk reduction in chemical engineering R&D through design and hazard avoidance.

Course Learning Outcomes

- By the end of this course, a student should be able to:
- Understand and reinforce importance of safety as a core value in R&D
- Inculcate safety culture in yourself and your working environment
- Develop ability to evaluate R&D safety issues: questions of both specific and more general/broad nature
- Thorough familiarity with key practical aspects of lab/R&D safety through the targeted lectures by experts
- Thorough familiarity with the ChBE safety website content
- Complete most of the required GT EHS trainings, and some RCR requirements, through this course

Required Course Materials

Required Textbook: None

GT Safety Website: <https://www.chbe.gatech.edu/laboratory-safety>

Useful Reading: Chemical Process Safety: Fundamentals and Applications; Crowl & Louvar, 3rd edition

Grading Policy:

In this course the following graded assessments and assignments are used to determine the course grade:

Exam	100 points
HW Assignment	100 points
Oral Lab Inspection Report	50 points
Written Lab Inspection Report	50 points
Attendance	-20 each absence
Total	300 points

The letter grade cutoffs in this course are as follows. A: 85 and above, B: 75-84, C: 65-74, D: 55-64, F: 54 and below, based on the overall score based on the relative weights above. These cutoff points will never be increased during the course.

Course Policies

Attendance and/or Participation

R&D safety culture is a core value at Georgia Tech. Accordingly, your research success will depend strongly on the level of engagement with the course material. Actively participating in all lectures and taking advantage of other learning opportunities offered (e.g. assignments, office hours) is critical for successful attainment of the learning outcomes. Attendance is required in all lectures. Excused absences (e.g., health, emergency, “approved Institute activities”) and other accommodations are provided in a manner fully consistent with Georgia Tech policies . The Georgia Tech Catalog describes policies around “approved Institute activities” (e.g., field trips and athletic events) and accommodations around religious observances.

Academic Integrity

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. Review [Georgia Tech’s Honor Code](#) and the student [Code of Conduct](#).

Cases of suspected cheating or plagiarism on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Core IMPACTS

Not applicable for this course.

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, [contact the Office of Disability Services](#) (404-894-2563) as soon as possible to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

Student-Faculty Expectations Agreement

At Georgia Tech, we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. [The Student-Faculty Expectations](#) articulate some basic expectations that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.