

Guidelines for COE Academic Integrity Process

Preamble

Engineering ethics is a tenet of our profession, and instructors are responsible for holding academic integrity standards and guiding students toward meeting those standards. We have a moral obligation to protect degree integrity and to ensure that the students graduating have the requisite skills and knowledge. Remote instruction modalities necessitated by the Covid-19 pandemic and anticipated in future offerings exacerbated the problem of cheating, and the proliferation of homework sites like Chegg, GitHub, and AI tools such as ChatGPT propel us into a new frontier. The current “College of Engineering Policy on Academic Integrity” that was approved by the EFC in 2017, while designed with the best intentions, has proven to be problematic. It is unevenly implemented, which results in widely variable standards for students as they navigate through their course of study. It compels disciplinary actions that are not aligned with best practices.

For our students to succeed, our graduates must #1) meet the learning objectives of our courses, and #2) understand that cheating is unacceptable in the classroom and the workplace. The faculty needs to be united and committed in this regard or we will not reach our goal. While we do not wish to tread upon the academic freedom to teach as instructors see fit, we would like to present this collection of best practices to avoid situations that foster cheating and respond effectively to appropriately penalize and deter future cheating.

Situations That Foster Cheating

These are situations that encourage students to cheat and should be avoided to the extent it is possible.

- Large classes/online testing/anonymity
- Students don’t come to class, do not care, and don’t study – unclear if it is attitude, laziness, or lack of study skills or responsibility
- Instructor does not care - no efforts at detection or penalty for cheating, or cheating opportunities are readily available
- Instructor is averse to conflict- follow-through is difficult
- Adequate help is not available and/or instructions are unclear – the student is desperate
- High stakes assignments and tests
- Perceived unfairness or unreasonable expectations
- Definition of cheating is not clearly defined - e.g. open book vs open note
- Sense of nihilism - some students strive to pass the class instead of learning the material

Best Practices to Discourage Cheating

- Provide resources to review prerequisite material, possibly ungraded and on student’s own time
- Provide clear learning objectives, clear grading policies, clear cheating definitions, and penalties on your syllabus
- Provide reasonable and fair expectations, clearly defined in the syllabus and consistent throughout the class
- Strive to teach everyone the material, and not for them to compete against each other

- Provide adequate access to help, such as office hours, tutors, supplemental instruction, and other resources that are clearly listed in the syllabus
- Provide adequate proctoring and enforcement. Here is the form to request exam assistants: https://csulb.qualtrics.com/jfe/form/SV_6s27Q5MRe1l1hkx
- Coordinate sections of the same course to reflect a common course outline
- Impress a sense of responsibility upon students to not cheat and the consequences of cheating. it should be included in the syllabus and could be considered as content for the introductory courses in the major
- Require a check box to acknowledge cheating definition and penalty on exams and other summative assessments
- Acknowledge faculty workload needed to effectively respond to cheating, e.g. assigned time or other compensation, or Integrity Awards
- Consistently report cheating ([Academic Integrity Violation Form](#))
- Assessments that are less prone to cheating
 - For exams/quizzes:
 - Open-book exams requiring application of content;
 - Open-ended problems requiring synthesis of material, explanation, and estimation;
 - Integration of essay or short-explanation questions;
 - Individualized tests by changing values on each question for each student, randomized questions from a question bank e.g. PrairieLearn.com
 - Multiple equivalent exam versions;
 - Oral exams/presentations;
 - Test higher order thinking skills rather than memorization.
 - Mastery-based learning and assessments
 - For group assignments or projects requiring articulation of team member contributions;
 - Proposals
 - Reports
 - Presentations (live or recorded/edited)
- Teach study skills in the lower division, and repeat ethics content periodically in key courses

Guidelines for Cheating Penalties

- Policy Statement PS 21-01 will be observed (
- Restorative justice plus penalty is more effective than penalty alone to deter future cheating. (<https://www.csulb.edu/student-affairs/wave>)
- Penalties should be commensurate with the seriousness of the offense.
- Penalties could be increased for repeated offenses within the same course by the instructor.
- Penalties could be increased for advanced standing in the program and major specific courses

Syllabus Statement

Plagiarism/Academic Integrity Policy:

Cheating, plagiarism, or any other act of violation of the Academic Integrity policy is counterproductive to learning and is a breach of the engineering ethics required by our profession. Work that you submit

is assumed to be original unless your source material is documented appropriately, using proper citation. Using the ideas or words of another person, even a peer, a website, or AI-generated content as if it were your own, is plagiarism. Any individual or group caught cheating on homework, lab assignments, or any exam/quiz will be subjected to the allowable academic actions under the University's regulations, including no credit for the work concerned and possible harsher penalties depending on severity, frequency, and upper division status. To learn more about the University policy on Cheating and Plagiarism, visit: Academic Information and Regulations-Cheating and Plagiarism.

<https://www.csulb.edu/academic-senate/policy-academic-integrity-regarding-cheating-and-plagiarism>

Prerequisite Knowledge Assessment

- Accurate assessment of pre-requisite knowledge and effective remediation is recommended to minimize cheating.
- When most of the students lack sufficient understanding of a pre-requisite topic, it is best to provide alternative remediation such as tutoring sessions or reading materials. If insufficient prior knowledge affects a few students, counseling them individually according to the nature of the gaps in their knowledge and skills could prevent cheating.
- How can we encourage active learning in students who need more help and may cheat? To prevent cheating, we need to differentiate up front, students' orientation towards learning versus their orientation toward grades by acknowledging their efforts.

Tools to identify / discourage cheating

JPLAG – Detects Software Plagiarism. Supports Python, C++ and many other languages

(<https://github.com/jplag/JPlag>)

MOSS – (Measure Of Software Similarity) is an automatic system for determining the similarity of programs. Supports many languages (<https://theory.stanford.edu/~aiken/moss/>)

Turnitin – Internet-based similarity detection service Included in Canvas

(<https://www.csulb.edu/academic-technology-services/instructional-design/turnitin>)

Canvas Log File – Canvas Classic Quiz captures a log file while the student is taking a quiz. This log file identifies the time each question was answered and tracks when the student tabbed off the quiz. If the quiz is a closed resource quiz, the student should not be tabbing off during the quiz. While this would not prove the student was cheating, it would certainly be appropriate to ask the student to explain why they tabbed off the quiz. (Note: This feature is only available in the “classic quiz”. It is not available in the “new quiz”

Lockdown Browser - ([Respondus - Instructional Design | California State University Long Beach \(csulb.edu\)](https://www.csulb.edu/instructional-design/lockdown-browser)) A custom browser that restricts access to other applications and websites, ensuring that students remain focused on the exam content without the ability to cheat or access unauthorized resources. The Lockdown Browser is integrated within Canvas for secure online examination.

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