



Policy Title: Department of Bioengineering Academic Integrity

Policy Effective Date: August 15, 2022

I. Purpose

Bioengineers must maintain high standards of integrity, ethics, and responsible conduct because their actions directly impact patient health. In the CU Denver Department of Bioengineering (BIOE) we strive to teach and model professional ethics based on the National Society of Professional Engineers canons of ethics for engineers¹, the Biomedical Engineering Society Code of Ethics², and the American Medical Association Code of Ethics for Medical Research and Innovation.³ One of the defined undergraduate student outcomes is “an understanding of professional and ethical responsibility”⁴ and one of our graduate program student outcomes is “Ethical Conduct: Students will be able to recognize ethical issues, consider multiple points of view, and use critical and ethical reasoning to determine the appropriate behavior to follow in the practice of biomedical engineering in a global context.”⁵ Though instruction in ethics comes primarily from didactic coursework and student project requirements, the best nurturing of professional ethics can come from modeling standards and integrity in academic training.

Per the University of Colorado Denver catalog, “A university’s reputation is built on a standing tradition of excellence and scholastic integrity. As members of the University of Colorado Denver academic community, faculty and students accept the responsibility to maintain the highest standards of intellectual honesty and ethical conduct in completing all forms of academic work at the university.”⁷ The International Center for Academic Integrity has found that effective policies are based around fundamental values of honesty, trust, fairness, respect, responsibility, and courage, and that the success of an academic policy can be optimized if the policy is clear, fair, transparent, equitable, consistently implemented, and regularly assessed.⁶ As a department that spans multiple campuses, colleges, and schools, we feel that we need a single clear policy that can be applied fairly and equitably to all students. This policy aims to reinforce these values and clearly define departmental procedures.

This policy follows the spirit of existing CU Denver, CEDC and AMC Graduate School policies, while defining specific departmental procedures for all students. The University of Colorado Denver has Administrative Policy #7050 Academic Integrity⁸ that defines a top-level Academic Integrity Committee (CU Denver AIC) and record keeping. The CEDC has an honor code that defines specific infractions and consequences, and all students in the CEDC sign this honor code.⁹ In addition, the CEDC Student Grievance policy defines the process for appealing departmental findings and consequences related to academic integrity violations to a CEDC Disciplinary Committee.¹⁰ The CEDC has an agreement of understanding with the CU Denver AIC that students in CEDC majors and courses follow the CEDC honor code, that violations of academic integrity will only be reported to the UC Denver database if “the student is found guilty and accepts that finding and the accompanying penalty,” and that the students will be able to appeal CEDC Disciplinary Committee decisions to the CU Denver AIC only if “the student has maintained his/her innocence throughout the CEDC process or has argued to the chair or associate dean that she/he was unfairly treated by the faculty person in regards to the alleged incident.”¹¹ In addition, the Graduate School at AMC has a policy that establishes an ad hoc Honor Code Committee that can be convened by the assistant dean to adjudicate disagreements related to academic integrity.

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This policy applies to all students in undergraduate, graduate, and certificate programs in Bioengineering, non-degree students enrolled in a BIOE course, graders, teaching assistants, instructors, thesis mentors and faculty in the department of Bioengineering. It will be applied equally to all students enrolled in BIOE courses and doing academic research in Bioengineering laboratories and is applicable in all aspects of academics including coursework, laboratory work, applications, internships, preliminary and comprehensive PhD examinations, and thesis and dissertation defenses.

This policy should be distributed to and signed by all new students enrolled in Bioengineering courses.

II. Process

- a. Most of the responsibility for academic integrity rests with the instructor and student. In general, an honest and respectful discussion of the expectations and understandings involved with minor consequences or required training, along with an official warning about more severe consequences if the behavior continues, will resolve most incidents.
- b. Incidents that are discovered by a student, grader, teaching assistant, colleague, staff, or person other than the instructor should be reported to the course instructor of record. If the incident involves a graduate thesis, dissertation, preliminary exam, or comprehensive exam, then it should be reported to the student's committee chair or research mentor if they do not have a committee chair (referred to in this policy as the "instructor").
- c. In general, if an instructor suspects or has evidence of a violation of academic integrity, that instructor should follow the following process for informal resolution. Note that if the incident involves multiple courses, warrants dismissal from the department, or when the instructor feels unqualified to make a determination, the case may be directly referred to the BIOE Academic Integrity Committee by contacting the BIOE department chair.
 - i. Contact the BIOE Academic Integrity Committee (BIOE AIC) chair to document the suspicion and allow them to review records for previous incidents of academic integrity violations by that student. If the BIOE AIC chair finds that this would be the second (or more) violation, the BIOE AIC chair will contact the BIOE department chair with the student history and current allegation. The department chair can then decide to convene the BIOE AIC to investigate, decide on actions or consequences without input from the BIOE AIC, or request that the instructor and student attempt to address the allegation without considering student history.
 - ii. Provide the student with a written notice of allegations, and a deadline for a meeting or response. In keeping with the CU Denver AIC Policy⁸, the student should have at least 72 hours between the notification of the allegation and a required meeting or response, though the meeting or response can occur sooner if the student agrees.
 - iii. Have a one-on-one meeting with the student to discuss the incident and expectations and understandings. Allow the student to provide their full perspective. The best practices section recommends having one other faculty in attendance at this meeting.
 - iv. Based on the information obtained, determine whether or not the violation is substantiated.
 - v. Determine consequences, if any. Consequences should be fair and equitable taking into consideration the full situation and whether multiple violations have occurred in this course. If consequences have been detailed in the course syllabus, these should generally be followed though modifications based on specifics of the incident or considering previous incidents in this or other courses are allowed. Note the



- CEDC Honor Code specifications do not need to be followed at this level. If the consequence is not detailed in the syllabus, it is at the discretion of the instructor of record.
- vi. Consequences can include, but are not limited to, a written warning, required additional assignments, reflection essay, academic integrity module review or seminar, completion of another type of training course, other educational sanctions as assigned, grade reduction on assignment or test, grade of F on assignment or test, grade letter reduction in the course, or grade of F in the course.
 - vii. Report the incident along with consequences and warnings, to the chair of the BIOE AIC.
- d. The student should behave honestly and respectfully in any investigation. If the student accepts the finding and consequence(s) determined by the instructor, then the incident is reported to the BIOE AIC chair. If the student disagrees with either the finding or the consequence(s), the student may appeal the decision within 72 hours to the Bioengineering Department Chair.
 - e. Referrals, appeals, and the final determination of consequences are the responsibility of the Department Chair of Bioengineering. The department chair can then decide to convene the BIOE AIC to investigate, decide on actions or consequences without input from the BIOE AIC, or request that the instructor and student make another attempt to address the allegation.
 - f. At the time that an incident is referred to the BIOE AIC, the chair should also inform the student's academic advisor or, if the student is a graduate student and has a research mentor, the student's research mentor, who may act as an advocate for the student.
 - g. The BIOE AIC can launch a more extensive investigation, as appropriate. They will review all evidence and materials provided by the student and the instructor and interview witnesses identified by the student and the instructor. The BIOE AIC must make a recommendation and communicate this to the department chair within 30 days of referral of the case to the committee by the BIOE department chair. The chair will then make a final determination of the next step and consequences. Once the investigation is complete, the BIOE AIC has the following options for its recommendation to the department chair:
 - i. Recommend upholding the decision of the instructor
 - ii. Recommend dismissing the case
 - iii. Recommend consequences to the department chair. These will be based on the ethical and academic integrity conduct of the student throughout the program and will be fair and equitable to ensure the integrity of the BIOE program. If consequences have been detailed in the course syllabus, these should generally be followed though modifications based on circumstances of the incident or considering previous incidents in this or other courses are allowed. If the consequence is not detailed in the syllabus, it is at the discretion of the committee.
 - iv. Consequences can include, but are not limited to: a written warning, required additional assignments, reflection essay, academic integrity module review or seminar, completion of another type of training course, other educational sanctions as assigned, grade reduction on assignment or test, grade of F on assignment or test, grade letter reduction in the course, grade of F in the course, or dismissing the student from the Bioengineering program.
 - v. Recommend that the department chair refer the student to the CEDC Disciplinary

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Committee in cases where a departmental decision cannot be reached and cases involving multiple departments. If the department chair feels that suspension or expulsion from the University of Colorado at Denver may be appropriate, the BIOE department chair may also decide to refer the case to the CEDC Disciplinary Committee. When the case goes to the CEDC, it will also be subject to the provisions of the CEDC Honor Code.⁹

- h. After the BIOE AIC has made a its recommendation and the department chair has come to a final decision, the student may appeal to the CEDC Disciplinary Committee. This procedure is defined by CEDC “Student Grievance Procedure”.¹⁰
- i. After a finding by the CEDC Disciplinary Committee, if the student has maintained his/her innocence throughout the CEDC process or has argued to the chair or associate dean that she/he was unfairly treated by the instructor of record in regards to the alleged incident, then the student can appeal the decision to the CU Denver AIC pursuant to CU Denver Policy #7050.
- j. The BIOE AIC chair will keep records of all incidents, warnings, and consequences related to a student in a confidential file separate from the student’s academic record for 5 years after the student’s last.

III. Responsibilities

a. Students

This policy applies to all students in undergraduate, graduate, and certificate programs in Bioengineering and all non-degree students enrolled in a BIOE course.

- i. Students have the responsibility to know, understand, and comply with the ethical standards of the university. We trust that students who suspect or observe violations of academic ethics have the courage to report them to their teaching assistant, instructor, the department chair, or the Office of the Dean.
- ii. Students have the responsibility to participate in investigations with honesty and respect.

b. Faculty, instructors, TAs, graders, and thesis mentors

Anyone with the responsibility of overseeing a course, grading assignments, mentoring a dissertation, thesis, or project, or other academic instruction has the responsibility to understand this policy and ensure the students understand it also.

- i. Clarity of policy
Instructors have the responsibility of providing clarity on the expectations of all assignments, including the extent of group work allowed, resources allowed, etc.
- ii. Handling and documenting potential violations
Faculty, instructors, TAs, graders, and thesis mentors have the responsibility to identify potential violations and investigate possible violations of academic integrity. The instructor should meet with the student and determine appropriate consequences. The instructor should report incidents, consequences, and warnings to departmental support staff.
- iii. Consistency and Fairness
This policy intentionally does not dictate specific consequences for each violation, as the circumstances vary for each violation and need to be considered to keep the process fair and equitable. The instructors all have the responsibility to keep the process consistent and fair, and to consult with appropriate staff or the department chair when necessary.



c. BIOE Academic Integrity Committee

This standing committee will give guidance and investigation of incidents at any point in the process when needed through appropriate request from the BIOE department chair.

i. The committee will be composed of the following:

Two (2) yearly student members – one graduate and one undergraduate. The Bioengineering Undergraduate Affairs Committee (BUAC) will nominate and approve the undergraduate student. The Graduate Affairs Committee (GAC) will nominate and approve the graduate student. This will occur at the start of the academic year.

These members of the committee must be current students in good standing in a Bioengineering program. These students must have successfully completed the following training courses in SkillSoft:

- CU: Discrimination and Sexual Misconduct – CU Denver | Anschutz
- CU: FERPA

Two (2) core faculty in Bioengineering who are appointed by the Bioengineering chair.

If a faculty member on the committee has a conflict of interest, another member will be appointed by the chair for that specific investigation. These faculty are expected to serve for 1 year. One of these faculty members will be designated as the chair of the committee and will be responsible for maintaining records and yearly reporting as detailed below.

ii. Interviews, investigation, clear and fair recommendation

This committee will be in charge of the investigation and can interview any involved parties, witnesses, or others with insight into the case. The investigation and subsequent recommendation of the violation status and consequences will be communicated to the BIOE department chair within 30 days of the committee receiving the referral. A recommendation from the Academic Integrity Committee requires a minimum approval by of 3 out of the 4 BIOE AIC members.

iii. Escalation to the CEDC Disciplinary committee

In cases where the violation involves multiple departments, or the BIOE AIC cannot reach a ruling with a majority approval, the committee should recommend that the department chair refer the case to the CEDC Discipline Committee. If the department chair feels that suspension or expulsion from the University of Colorado at Denver may be appropriate, the BIOE department chair may also decide to refer the case to the CEDC Disciplinary Committee.

d. BIOE AIC chair

One faculty member on the BIOE AIC will be designated as the committee chair by the BIOE department chair.

i. Confidential record keeping

The BIOE AIC chair should be copied on all official warnings and all consequences imposed by an instructor and should keep records of all incidents, warnings, and consequences related to a student in a confidential file separate from the student's academic record. Records of student conduct should be retained for 5 years after the date of the last attendance per CU Denver policy.¹²



- ii. Reporting of student history
- iii. When an allegation of academic misconduct is initiated, the BIOE AIC chair should review the records. In cases where the student has had 2 previous violations of academic misconduct in which either the student did not contest the allegation and consequence, or the BIOE department chair found the violation to be substantiated the BIOE AIC chair will inform the BIOE department chair. The department chair can then decide to convene the BIOE AIC to investigate, decide on actions or consequences without input from the BIOE AIC, or request that the instructor and student attempt to address the allegation without considering student history.
- iv. When the BIOE department chair convenes the BIOE AIC, the BIOE AIC chair will review the student's records and inform the BIOE AIC of previous warnings, consequences, or findings that the student violated academic integrity.
- v. When a student who has previously taken BIOE courses applies to the department, the BIOE Undergraduate Affairs Committee or BIOE Graduate Affairs Committee, depending on the application program, will provide the BIOE AIC chair with the name of the student. If the BIOE AIC chair finds that the student has had a finding of academic misconduct, the BIOE AIC chair will inform the BIOE department chair. The BIOE department chair will then decide on the appropriate action regarding the student's admission.
- vi. Yearly analysis of the policy data
Each year, at the BIOE departmental curriculum retreat attended by BIOE instructors and staff, the BIOE AIC chair will report summaries of the total number of academic integrity violations sorted by program (undergraduate or graduate) and category (Plagiarism, Cheating, Fabrication or Falsification, Multiple Submission, Misuse of Materials, or Complacency). This report will not contain names and will attempt to maintain confidentiality. The BIOE AIC chair should then lead a discussion on generalities of cases without specifics of the students involved.

IV. **Classifications and Examples of Violations of Academic Integrity** (From CU Denver Administrative Policy #7050 Academic Integrity⁸)

- a. **Academic misconduct.** Academic misconduct is defined as (1) a student's use of unauthorized assistance in attempt to deceive an instructor or other person who is assigned to evaluate the student's work in meeting course and degree requirements, or (2) actions that interfere with the ability of the instructor to fairly judge the work of the student or other students. Academic misconduct includes any of the following behaviors:
 - i. **Plagiarism:** Plagiarism is the use of another person's distinctive ideas or words without acknowledgment. The incorporation of another person's work into one's own requires appropriate identification, regardless of the means of appropriation. Plagiarism includes but is not limited to the following, when the source is not disclosed:
 1. Word-for-word copying of another person's ideas or words;
 2. The mosaic (the interspersing of one's own words here and there while, in essence, copying another's work);
 3. The paraphrase (the rewriting of another's work, yet still using their fundamental idea or theory);
 4. Fabrication of references (inventing or counterfeiting sources);
 5. Submission of another's work as one's own; or
 6. Neglecting quotation marks on material that is otherwise acknowledged.
 - ii. **Cheating:** Cheating involves the possession, communication, or use of information, materials, notes, study aids, or other devices not authorized by the instructor in an academic exercise, or communication with another person during such exercise for



the purpose of obtaining or providing unauthorized information or materials. "Authorization" is legitimate only if given by the faculty member responsible for the evaluation of the student's work. Examples of cheating include but are not limited to:

1. Copying from another's work or receiving unauthorized assistance from another person during an academic exercise or in the submission of academic assignments;
2. Using an electronic device when not permitted;
3. Collaborating with another student during an academic exercise without the prior consent of the instructor.

iii. **Fabrication and falsification:**

1. Fabrication: inventing or counterfeiting information, such as creating results not obtained in a study or laboratory experiment.
2. Falsification: deliberately altering or changing results to suit one's needs in an experiment, creative work or other academic or creative exercise.

iv. **Multiple submissions:** The submission of academic work for which academic credit has already been earned, when such submission is made without instructor authorization.

v. **Misuse of academic materials:** The misuse of academic material includes, but is not limited to, the following:

1. Stealing or destroying library or reference materials or computer programs;
2. Stealing or destroying another student's notes or materials, or having such materials in one's possession without the owner's permission;
3. Receiving assistance in locating or using sources of information in an assignment including, but not limited to, textbook solution manuals when such assistance has not been authorized by the instructor;
4. Possessing or using prior examinations or answer keys, unless authorized by the instructor;
5. Altering, forging, copying and pasting, or falsifying academic materials;
6. Selling or purchasing prior examinations, digital media, quantitative formulae, papers, or assignments.

vi. **Complicity in academic misconduct:** Complicity involves knowingly allowing or contributing to another's academic misconduct.

V. **Best practices** These are not required per this policy but are suggestions to aid in understanding of this policy and reduce incidents of violations.

- a. Link to this policy on all syllabi and review it the first day of class.
- b. Clearly state on all assignments the policies for teamwork, resources used, attribution, etc.
- c. For first offenses that could be due to a lack of understanding, such as plagiarism, the instructor should check with the support staff for previous warnings or violations, and would likely give a zero on the assignment and a warning and explanation of the offense in writing, copied to the support staff. This consequence can change based on the nature of the offense.
- d. An additional faculty member should be present along with the instructor at meetings with students to discuss incidents.
- e. For further offenses or egregious cheating, the expectation is the student would receive an F for the course.
- f. Multiple offenses spanning multiple classes would be grounds for dismissal from the BIOE department.
- g. Violations by Teaching Assistants should be reviewed more stringently, with harsher consequences, than those by students.
- h. Giving assignments early that are run through TurnItIn can identify issues and aid in early



trainings and warnings for some students. Note that the output of a TurnItIn report must undergo examination and interpretation to determine if it identifies a violation.

- i. Instructors should consider the use of current events, recent articles, or other timely materials in assignments and projects to hinder the ability to cheat from internet sources.
- j. Major projects, term papers, theses, or dissertations should have preliminary reports and milestones that can aid in detection of any academic integrity violation.
- k. For laboratory reports, theses, or dissertations, an analysis of primary lab notebooks and data should be included in the evaluation.
- l. Exams should be in-class, with an exam proctor. Students who leave class during an exam should be required to leave their phones and exam copies in the room until they return.
- m. All evidence considered by the instructor should be copied and submitted to the support staff with the warning or consequence letter.

VI. Example warning letter:

To: Holden Caulfield, student in BIOE1234

From: Professor Integrity, instructor BIOE1234

CC: Mr. Recordkeeper, administration personnel in Bioengineering

Dear Mr. Caulfield,

As per our discussion, portions of your assignment submission, “Bioengineering of the long-tailed hamster” were copied, without attribution, from another source in violation of the departmental policy and the course policy on plagiarism. You were notified of this incident on October 27th, 2019 and met with me and a departmental representative on October 31st, 2019. As a result, you were given a 0 on that assignment. This letter serves as a warning that further findings of plagiarism in this class will result in failing the course and other findings of academic misconduct in other BIE courses could have further consequences, including removal from the department. If you accept this decision, no action is necessary at this time and I trust that we will have no further incidents. If you wish to appeal this decision, please inform the BIOE department chair within 3 days.

-Abigail M. Integrity, PhD

VII. References

1. *Code of Ethics for Engineers*. National Society of Professional Engineers. Publication number 1102. July 2019. [Online link](#).
2. *Biomedical Engineering Society Code of Ethics*. Biomedical Engineering Society. 2004. [Online link](#).
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4. Accreditation: Student Outcomes. University of Colorado Denver, College of Engineering, Design, and Computing, Department of Bioengineering web site. [Online link](#).
5. Accreditation: Graduate Student Outcomes. University of Colorado Denver, College of Engineering, Design, and Computing, Department of Bioengineering web site. [Online link](#).
6. *The Fundamental Values of Academic Integrity*. Second Edition. International Center for Academic Integrity. Clemson University. 2014. [Online link](#).



7. Academic Integrity and Discipline Policies. *2019-2020 Undergraduate Catalog*. University of Colorado Denver. 2019. [Online link](#).
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11. Agreement of Understanding for College of Engineering, Design, and Computing approval of Campus Administrative Policy #7050. March 2019.
12. University of Colorado Denver | Anschutz Medical Campus Record Retention Matrix. Referenced in University of Colorado policy APS#2006. October 2017. [Online link](#).