

# ECEG 201 - Introduction to Electrical and Computer Engineering Design

## Spring 2020 Syllabus

### COVID-19 REVISION

**Instructor** Prof. Joe Hass  
570.877.1860  
[kjh016@bucknell.edu](mailto:kjh016@bucknell.edu)

**Office hours** There are no in-person or fixed-schedule office hours. Send me an email if you want to ask a question or chat.

**Prerequisites** Permission of the instructor

**Web Sites** Homework assignments, lecture notes, and other course materials will usually be sent to you directly by email. Additional materials may be made available on the instructor's course web page:  
[www.eg.bucknell.edu/~kjh016/courses/eceg201s20/](http://www.eg.bucknell.edu/~kjh016/courses/eceg201s20/)  
Grades will be posted on the course Moodle page:  
[moodle.bucknell.edu/course/view.php?id=36485](http://moodle.bucknell.edu/course/view.php?id=36485)

**Email** Time-sensitive announcements may be sent via email, so check your email at least daily. If you want to use a personal email account rather than your Bucknell email, you must inform me by email. **Email messages to me should include the text "ECEG 201" in the subject to prevent them from being discarded as spam.**

## Purpose of the Course

This introductory ECE design course covers basics of electronic design focusing particularly on fabrication, measurement, and professional communication. Students will design, fabricate, and test electronic circuits and learn standards for manufacturability and professional communication.

## Course Outcomes

At the conclusion of this course, you should be able to:

- Use modern techniques and equipment to design, fabricate, populate, and troubleshoot a functioning printed circuit board.
- Design a test protocol and conduct appropriate experiments to determine the level of functionality and performance of an electronic device.
- Effectively communicate the details and results of an experiment in a manner that would be appropriate for practice in electrical or computer engineering.

## Important Policies

I am happy to accommodate special student needs, but such accommodations must be approved in advance, and in writing. If you have a disability that may have some impact on your work in this class and for which you may require accommodations, please feel free to talk to me as well as submit the Disability Accommodation Request Form or contact the Office of Accessibility Resources at [OAR@bucknell.edu](mailto:OAR@bucknell.edu), 570-577-1188 or in room 107 Carnegie Building so that such accommodations may be arranged.

As a general rule, anything that you submit for grading must be your own original work. You must properly cite the source of *any* material that you copy, quote, or paraphrase from *any* other source. This includes, but is not limited to, text,

data, code, or graphic material from another student, the instructor's lecture notes, a textbook, or the internet. Failure to do so will be cause for referral to the [Board of Review on Academic Responsibility](#). You should take some time to review the information about plagiarism and collaboration on the [Resources for Students](#) page.

After 2020-03-16, collaboration on **any** work for this class is **not allowed**. You **may not** discuss homework assignments, laboratory exercises, or project work with any other student. Everything you submit for grading must be your **own original work**.

## Committee on Instruction Statements

At the College of Arts and Sciences Meeting on December 5, 2012, the Committee on Instruction recommended to the faculty that they add the following two texts to their syllabi:

## Bucknell University Honor Code

As a student and citizen of the Bucknell University community:

- I will not lie, cheat or steal in my academic endeavors.
- I will forthrightly oppose each and every instance of academic dishonesty.
- I will let my conscience guide my decision to communicate directly with any person or persons I believe to have been dishonest in academic work.
- I will let my conscience guide my decision on reporting breaches of academic integrity to the appropriate faculty or deans.

## Bucknell University expectations for academic engagement

"Courses at Bucknell that receive one unit of academic credit have a minimum expectation of 12 hours per week of student academic engagement. Student academic engagement includes both the hours of direct faculty instruction (or its equivalent) and the hours spent on out of class student work. Half and quarter unit courses at Bucknell should have proportionate expectations for student engagement."

## Course Grades

Your final course grade will be based on your exam scores, homework grades, and laboratory work. The relative weight of each component of your final grade is given below. Please note that there will be no opportunities for individual extra credit... that's not fair to the other students.

You are required to check in with the instructor at least twice each week. Details regarding the check-in procedure may change as we better understand the needs and technology capabilities of the students, and updates will be sent to you by email. You may check in by

- sending an email to [kjh016@bucknell.edu](mailto:kjh016@bucknell.edu) (if you use a personal email address rather than your Bucknell email address you must tell me your personal address)
- leaving a voice message at 1.570.877.1860, my office telephone. You **must** leave a voice message clearing stating your name.

These regular check-ins will be considered part of the **Professionalism** element of the course. When the course was conducted in person, the professionalism element allowed for a deduction of up to 3 points from your final score for disruptive or distracting behavior. Under the revised COVID-19 policies, failing to check in as required may result in a deduction of up to 3 points from your final course grade.

In order to receive full credit for your homework, lab reports, and exams you should follow the guidelines in [Getting Full Credit](#).

- Homework and Lab Reports
  - All homework will be submitted by email to the instructor. In general, written work must be submitted as a pdf file. However, follow the specific instructions provided with each assignment.

- You **may not** collaborate on any assignments, written work, projects, laboratory exercises, or programming.
- Homework assignments will be sent to you by email. Be sure to forward your Bucknell email to a personal email account if you choose to use a personal account.
- Each assignment will have a specific date and time when it is due. Homework turned in after the specified date and time is **late**. Late homework turned in within 24 hours of the time it was due will be penalized by 10% of the assignment's value. Homework turned in more than 24 hours late but less than 72 hours late will be penalized by 20%.

**No credit** will be given for homework submitted more than 72 hours after the time that it is due without prior written permission from the instructor.

- If you are explicitly required to submit code by email it *must* be attached as a plain text file with the appropriate extension (e.g. .py, .m). Don't even think about putting your code into a Word document.
- Laboratory sessions
  - Your work **must not** be publicly accessible either during or after a laboratory session. Your programming for this class should be created and maintained in your private netSPACE folder. Making your code available to another student, either directly or indirectly, will be considered academic misconduct.
- Examinations and Quizzes
  - All exams must be taken and completed within the assigned time unless the instructor has granted an exception *in writing* or received specific accommodation instructions from the Dean's office.
  - Students who have an accommodation regarding examinations are nevertheless expected to complete the examination on the same day that it is scheduled, and to contact the instructor in advance to make suitable arrangements.
  - Exams that are not completed within the assigned time are penalized a minimum of 20% of the exam's value, if completed within 24 hours of the assigned time.
- Final course grades
  - Homework: 20%
  - Laboratory Exercises and Reports: 30%
  - Quizzes: 30%
  - Final Exam/Report/Project: 20%
- Converting numerical scores to letter grades

		B+	≥ 86.6%	C+	≥ 76.6%		
A	≥ 93.3%	B	≥ 83.3%	C	≥ 73.3%	D	≥ 60.0%
A-	≥ 90.0%	B-	≥ 80.0%	C-	≥ 70.0%	F	< 60%