1. Mid–term course evaluation. Please comment on the following.

   (a) Assignments: difficulty, appropriateness, whether or not they are clearly defined.
   (b) Lectures: pace, content, presentation (is writing legible, etc.).
   (c) Midterm exam: difficulty, length, appropriateness of topics.
   (d) Professor: availability, is he approachable, does he know what he is talking about.
   (e) Syllabus: organization, information, functionality of links.
   (f) MATLAB: introduction, usefulness, support from instructor.
   (g) What does the professor do particularly well?
   (h) In what area or areas does the professor need to improve?

If there is anything else you would like to comment on, please do. I will use this information to improve the second half of the course. Please enter this information on Canvas. Log into our course, then click on “Quizzes” and you will find it. I will only see the final compilation of answers, so your answers will be anonymous.


   (a) How old was Heaviside when his formal education ended?
   (b) What was Heavidside’s first job, in 1868?
   (c) What was his second career, which began in his mid–20’s?
   (d) Why was Maxwell’s original version of his equations difficult to understand?
   (e) What mathematical notation did Heaviside create?
   (f) What do we call the “second circuital law?”
   (g) What is your favorite Heaviside quote from the article? Why? Here are some of his quotes.

       Idiots consider me a madman about the bike...
       After that I did more work in a week than in all my previous years...
But that was when I was making discoveries. It matters not what others may think of their importance. They were meat and drink and company to me.

I should have been obliged to take some very decisive measures, and I am a determined character in my way.

Self-induction’s “in the air,”
Everywhere, everywhere;
Waves are running to and fro,
Here they are, there they go.
Try to stop’em if you can
You British Engineering man!

Shall I refuse my dinner because I do not fully understand the process of digestion?

The man ‘Ollie’ of Paignton, who lives in the garret at the music shop, is transformed into Mr. Heaviside, the gentleman who has taken Bradley View.

That of a Shakespeare or a Newton...


(a) What are the seven organizations that sponsor the “constellation” of satellites that together will improve the measurement of precipitation from space?

(b) GPM follows what other successful satellite mission focused on precipitation measurements?

(c) How frequently will (does) the “constellation” provide global (at least from the Arctic to Antarctic Circle) measurements of precipitation?

(d) What two instruments are on the GPM Core Observatory?

(e) Explain the advantage of including higher-frequency microwave radiometers on the GPM Core Observatory.

Please submit these last two questions electronically via email to me (bkh@iastate.edu) either in the body of the email or as a .txt, .rtf, or .docx attachment.