

1086-M5-2714 **Jacqueline Anderson Hall*** (hallja@longwood.edu), HS Box 72, Hampden-Sydney, VA
23943-0072. *Voting: The Intersection of Mathematics & Citizen Leadership.*

This talk will describe a module on voting developed for a liberal arts mathematics class. Included is a summary of the module, descriptions of activities and worksheets, student reaction and my evaluation.

Longwood University declares its mission to be the “preparation of citizen leaders.” A primary privilege and responsibility of citizenship is exercising the right to vote. Voting is beautifully situated at the intersection of mathematics and citizen leadership. We see presidential elections where the popular and Electoral College votes are split. The UN Security Council has some member countries who have the power to kill a motion while other members do not. What is going on in these votes?

This fall, I have decided to add a section on voting, scheduled just before the presidential election. Students will examine various methods of voting (Electoral College, plurality, different methods of determining a run-off, weighted voting), while observing paradoxes that occur. What do we mean by fairness? Is it possible for voting to be fair? Of course, at this point, I do not know how the students will react to this module on voting; however, I expect it to be an engaging and useful exercise. (Received September 25, 2012)