1. **Adoption of Agenda**

   Dr. Charles Steger

2. **Announcement of approval and posting of minutes of October 21, 2013**

   These minutes have been voted on electronically and will be posted on the University web.

   Dr. Charles Steger

3. **New Business**

   **Commission on Undergraduate Studies and Policies**
   Resolution 2013-14B
   Resolution to Approve the Bachelor of Science Degree in Nanoscience

   Dr. Audrey Zink-Sharp

4. **Announcement of acceptance and posting of Commission Minutes**

   These minutes have been accepted for filing by electronic vote and will be posted on the University web. Note that the purpose of voting on Commission minutes is to accept them for filing. University Council By-laws require that policy items be brought forward in resolution form for University Council action.

   Commission on Equal Opportunity and Diversity
   April 22, 2013

   Commission on Graduate Studies and Policies
   October 2, 2013

   Commission on Research
   September 11, 2013

   Commission on Undergraduate Studies and Policies
   October 21, 2013

   Dr. Charles Steger

5. **Adjournment**

   Dr. Charles Steger
Dr. Steger called the meeting to order at 3:00 p.m. A quorum was present.

1. **Adoption of Agenda**

A motion was made and seconded to adopt the agenda. The motion carried.

2. **Announcement of approval and posting of minutes of October 21, 2013**

Dr. Steger noted that these minutes have been voted on electronically and can be publicly accessed on the Governance Information System on the Web (http://www.governance.vt.edu).

3. **New Business**

**Commission on Undergraduate Studies and Policies**

Resolution 2013-14B

Resolution to Approve the Bachelor of Science Degree in Nanoscience

Ms. Kim O’Rourke informed the Council members that the background information was not posted with the resolution. The options are to wait until the next meeting to have the first reading or let it come to first reading at this meeting, and if members are not comfortable voting at the next meeting, the resolution can be deferred to the December 2, 2013, meeting. The general consensus was made to have the first reading today, and the background materials will be distributed immediately after the meeting.

Dr. Aubrey Zink-Sharp presented the resolution for first reading and directed questions to Gary Long and Dr. James Hefflin. Dr. Long indicated that this degree is a cross departmental action in an emerging field. Dr. Long asked Dr. Hefflin to give background on the degree proposal. Dr. Hefflin indicated that this program deals
with the science side of nanoscience, which is before things develop into technology. Students will be able to develop a firm foundation of nanoscience including understanding, characterizing, designing, and manipulating nanostructures at complex levels. This program comes out of the departments of Biological Sciences, Chemistry, Physics, and Geological Sciences. The program is a new initiative that will have a very strong hands-on component with several lab courses. Virginia Tech is fortunate enough to have established faculty in nanoscience which will enable Virginia Tech to become a leader in this field. Ours would be the first nanoscience major in the country.

Dean Chang informed the Council members that Virginia Tech has been able to accumulate quite a few topnotch faculty members in the field of nanoscience since the late 1990s. The university has also been a great help in acquiring equipment needed for this program. In the past, students were not able to take nanoscience courses until their senior year.

Dr. Chang informed the Council that Dr. Michael Hochella’s current project caught the attention of the National Science Foundation (NSF). Dr. Hochella stated that nanoscience is now a multi-trillion-dollar research industry and is a revolution that is just as important as the information technology and biomedical revolutions. Many think it is the next industrial age. Virginia Tech needs to join Cornell, Harvard, MIT, Berkeley, and Stanford in order to become a leader in the field. The National Nanotechnology Infrastructure Network (NNIN) is funded by the NSF for a twenty-year period for a sum of $320 million. Currently this is at the ten-year mark, and up to this point, Virginia Tech has not been a part of that. Virginia Tech has been asked by the schools named above to join them because of Virginia Tech’s forefront position in research and teaching. The proposal is before the NSF right now, awaiting a final decision for the next ten years for the entire group of eighteen universities. The NNIN wants Virginia Tech to be a partner because of the R1 research status in nanosciences and for Virginia Tech’s educational commitment. Virginia Tech is unique in the educational arena. The number of students in this program has grown over the past three years. The first year there were eight majors, the second year there were twelve majors, and the third year there were thirty majors.

4. **Announcement of Approval and Posting of Commission Minutes**

These minutes have been voted on electronically and will be posted on the University web (http://www.governance.vt.edu). Note that the purpose of voting on Commission minutes is to accept them for filing. University Council By-laws require that policy items be brought forward in resolution form for University Council action.

- Commission on Equal Opportunity and Diversity
  April 22, 2013
- Commission on Graduate Studies and Policies
  October 2, 2013
- Commission on Research
  September 11, 2013
- Commission on Undergraduate Studies and Policies
  October 21, 2013

5. **Adjournment**

There being no further business, a motion was made to adjourn the meeting at 3:23 p.m.