Proposal for Inclusion and Diversity training requirement, Department of Physics

Required topics:

1. The Virginia Tech Principles of Community as they apply to the valuing of human diversity and inclusion.
2. The impact that personal actions and words have on self, others, and the communities – university, national, and global – in which we live; issues of privilege, bias, power, prejudice, and discrimination; concepts of multiple personal, social, and cultural identities.
3. Available avenues of redress and our shared responsibilities as active by-standers.
4. The process of individual introspection required both to understand one's own forms of implicit or unconscious bias and to create inclusive environments.

The Physics Department proposes to fulfill these requirements by incorporating them into an existing required two-semester, one-credit course taken by all of our first-year graduate students, PHYS 5944.

We will fulfill the requirements (1-4) using the following approach (1) providing presentations by both Physics Faculty and by expert outside of the departments (2) small break-out discussion sessions, along with larger group discussions led by faculty (3) practical examples during the seminar and (4) large forum discussion (2 every Spring semester) open to all physics graduate students (pizza reflection night) to discuss micro-aggression and the impact and consequences of word and actions. For this seminar we are going to invite external speakers from both the College of Science and the Graduate school.

PHYS 5944 includes a weekly "Introduction to Research" seminar in the fall semester and a series of more general seminars in the Spring semester. Seminars in both fall and Spring semesters are weekly. In the spring semester we will have guided discussions devoted to the professional development of our students including trainings in integrity and diversity (old proposal on Ethics and Integrity from the physics department, already approved).

The course requires the students to give an oral presentation at the end of the fall semester and a written paper at the end of the spring semester, and already incorporates ethics/integrity training at different levels.

In Spring 2019 we had the following seminars (with brief description of the topics discussed):

- *Professional Behavior:* focused on Principle of Communities (APS and Virginia Tech), creating and maintaining an inclusive environment through positive communication for both faculty and students; avenue of redress for students that feel that have been discriminated or targeted
- *Implicit Bias:* Cover the definition of Implicit Bias, examples of famous studies and videos examples with various examples of biases

- *APC Case Studies:* past case studied examined included discrimination on workplaces, academic bullying and other ethical dilemmas

Here is a list of modifications that we propose to incorporate in our PHYS 5944 to fulfill the new requirements on Inclusion and Diversity

Response of Point 1, *"The Virginia Tech Principles of Community as they apply to the valuing of human diversity and inclusion",* is currently (1) included in our fall orientation seminar for all incoming graduate students (graduate coordinator and graduate director), (2) in the case studies about ethics and integrity that are presented in the Spring semester (PHYS 5944) and (3) we will include our departmental graduate expectations of respect, civility, courtesy, and inclusiveness in the physics department graduate student handbook following the example given by the Department of Sociology.

- **The PHYS 5944 seminar material will be based on the American Physics Society (APS) guidelines for research conduct and ethics/integrity rules**.

  A copy of the slides used for the discussion can be found at the following link: https://www.aps.org/programs/education/ethics/upload/Ethics-Case-Studies-Teacher-Edition.pdf

- **New policy to be added to the Department of Physics Graduate Handbook:**

  The American Physical Society Statement on Ethics affirms that Physicists are citizens of the global community of science and share responsibility for its welfare. The success of the scientific enterprise rests upon two ethical pillars. The first of them is the obligation to tell the truth, which includes the prohibition of fabrication, falsification, and plagiarism. *The second is the obligation to treat people well, which includes the prohibition of abuse of power, and encouragement of the practice of fair and respectful relationships with colleagues, subordinates and students, and avoidance of bias.* The American Physical Society has adopted new Guidelines for Professional Conduct that incorporate these values. Professional integrity in the conception, conduct, and communication of physics activities reflects not only on the reputations of individual physicists and their organizations, but also on the image and credibility of the physics profession in the eyes of scientific colleagues, government and the public. Physicists must strive for continual improvement in their standards of ethical behavior and transmit improving practices with enthusiasm to future generations.

  The American Physical Society values a diverse membership and believes that the social science research on implicit bias illuminates the way implicit assumptions impact women and underrepresented groups in STEM.

  The Expectations of the Virginia Tech Graduate School (following the text proposed by the department of sociology) also include principles of academic integrity, civility, and inclusiveness.

Along the latter lines, the Department of Physics specifies courtesy and inclusiveness as ideals of professional conduct:

- **Civility** involves avoidance of coercion, harassment, intimidation, and exploitation, as these inhibit professional accomplishment. One maintains academic civility by maintaining courtesy and inclusiveness.
- **Courtesy** involves mundane deference (gestures of appreciation) toward colleagues regardless of personal differences and avoiding uninvited attention to nonprofessional aspects of colleagues' activities.
- **Inclusiveness** involves equal courtesy toward all colleagues and avoids treating personal differences and preferences as bases for professional decisions.

- **Appended to this current policy in our Graduate Handbook, we will also add the following statement about the *Virginia Tech Principles of Community:***

  Our departmental expectations of civility, inclusion, and respect are embedded and reaffirmed by Virginia Tech's *Principles of Community*:

  - Virginia Tech is a public land-grant university, committed to teaching and learning, research, and outreach to the Commonwealth of Virginia, the nation, and the world community. Learning from the experiences that shape Virginia Tech as an institution, we acknowledge those aspects of our legacy that reflected bias and exclusion. Therefore, we adopt and practice the following principles as fundamental to our on-going efforts to increase access and inclusion and to create a community that nurtures learning and growth for all of its members:

  We affirm the inherent dignity and value of every person and strive to maintain a climate for work and learning based on mutual respect and understanding.

  - *We affirm* the right of each person to express thoughts and opinions freely. We encourage open expression within a climate of civility, sensitivity, and mutual respect.
  - *We affirm* the value of human diversity because it enriches our lives and the University. We acknowledge and respect our differences while affirming our common humanity.
  - *We reject* all forms of prejudice and discrimination, including those based on age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, and veteran status. We take individual and collective responsibility for helping to eliminate bias and discrimination and for increasing our own understanding of these issues through education, training, and interaction with others.
  - *We pledge* our collective commitment to these principles in the spirit of the Virginia Tech motto of Ut Prosim *(That I May Serve)*.

Response of Point 3 *"Available avenues of redress and our shared responsibilities as active by-standers"* will be integrated adding an additional seminar on diversity in the Spring semester.

During this seminar implicit bias can be defined and presented with example videos, case studies and encouragement of reflection on personal biases. The students will then be introduced to the implicit bias test at the following link (https://implicit.harvard.edu/implicit/takeatest.html) that will be made available through the course CANVAS site.

Seminars are usually led by a faculty that presents a set of slides with case studies and then followed by an open discussion in which all the students will actively participate.

- **New policy to be added to the Department of Physics Graduate Handbook:**

Available channels for redress will be written in our Physics Department Graduate Student Handbook, the relevant portions of which are quoted below.

This policy will be formally discussed in the required Orientation to all incoming first year graduate students.

- Complaints about professional misconduct (integrity and civility) are concerns of both the targets of those complaints and of the department. As such, they are not appropriate topics of informal discussion alone. Students giving voice to complaints of misconduct should, in a timely fashion, initiate processes in which the department and the targets of the complaints would have opportunities to respond. Students can initiate such processes by sharing complaints with departmental or university authorities, as listed below.

- The Department of Physics and Virginia Tech have means to address complaints of misconduct. Relevant offices include:

    - Graduate Program director, Department of Physics — discussion of concerns about graduate student integrity and civility within the department, all of which remain in confidence other than sexual harassment/assault, mention of which must result in a phone call to the Human Resources Title IX coordinators, as noted below.

    - Chair, Department of Physics — discussion of concerns about faculty conduct, all of which remain in confidence other than sexual harassment/assault, mention of which must result in a phone call to HR Title IX, as noted below.

    - Graduate Program coordinator — discussion of any concerns related to treatment by others, including officials, in the university, all of which remain in confidence other than sexual harassment/assault, mention of which must result in a phone call to ….

Human Resources, Title IX — reports of sexual harassment/assault, which reports result in HR officer outreach to alleged victims, who then choose whether to authorize continued investigation.

Student Conduct, in the Dean of Students Office — reports of concerns about student conduct, including disruption, threats, incivility, and harassment.

Graduate Honor System — reports of violations of academic integrity.

For **confidential** discussions of issues of civility, you may contact:

The Women's Center's Counseling staff (concerns about gendered conduct, sexual assault, sexual harassment)
Cook Counseling Center

Response of Point 4 and 2 "*The process of individual introspection required both to understand one's own forms of implicit or unconscious bias and to create inclusive environments"* while partially included in the previous proposed seminars can be underlined in an additional class meeting where the students after taking the implicit bias test (mentioned before) will have a guided discussion of various other cases and related materials, such as the letter to SCOTUS from professional physicists (re: Fisher vs. University of Texas, concerning affirmative action), articles such as the one by Daane, Decker, Sawtelle ("Teaching about racial equality in introductory physics classes," *The Physics Teacher* **55** (2017) 328) concerning diversity in physics workplaces and classrooms, and point out resources for e.g. LGBT students.

In addition, we will make others pertinent studies and readings available through the course CANVAS site.

We will use material that can be found at the website of our professional society, the American Physical Society (APS), which are relevant to these discussions, for example:

- https://www.aps.org/programs/minorities/index.cfm
- https://www.aps.org/programs/women/index.cfm
- https://www.aps.org/programs/lgbt/index.cfm

Furthermore, the APS case studies mentioned above may also touch on some of the optional topics below that could focus other discussions.

Additional topics/focus areas:

1. Inclusion and diversity in a global context; institutional and governmental policies affecting immigration, accessibility, affordability, and related matters.
2. Historical perspectives on diversity and the impact of traditions of privilege on the development of the discipline represented by the particular academic unit; inclusive pedagogy.
3. Effective strategies for inter- or intrapersonal conflict resolution; pathways to individual reconciliation of unconscious or implicit bias.