

August 16, 2007

Louise Pagé-Valin  
Associate Vice-President  
Human Resources Services  
University of Ottawa  
Tabaret Hall  
550 Cumberland Street  
INTRA  
(and by e-mail)

Dear Mrs. Pagé-Valin:

***Notice of grievance (my code G-11): Employer's interference with PHY 4006 course delivery.***

*This grievance is made public, in the interest of transparency and the public good.*

In a letter dated July 18, 2007 (attached below), I asked the dean to intervene in order to correct a recent intervention by the chairman of my department that barred me from offering a particular project topic in the physics fourth-year project course PHY 4006 2007-2008. My July 18<sup>th</sup> letter included relevant documentation, in the form of email exchanges in my possession that provided a clear description of the situation (all attached below).

The Dean answered by letter (attached below) on July 27<sup>th</sup>, after I pressed him to do so (see item-5 of my email dated July 26<sup>th</sup>, attached below). The dean's letter supports the chairman's decision, in contravention of the Collective Agreement (9(a), 10.3.2(e), 10.3.2(g), 21.1.2(b), 22.2.4.4, and other sections as applicable). The dean's letter also misquotes my project title as "Politics and Ethics Applied to the Physics Profession", presumably to stress the "Applied to" in making his point.

#### NATURE OF THE PHY 4006 PHYSICS PROJECT COURSE

PHY 4006 "Physics Research Project" is a six-credit project course where students are individually supervised each by a different professor on a research project that is typically in a research area of the professor. The project is chosen by consultation between the professor and the student. Professors are asked to provide project titles so that examples of project availabilities can be advertised to the students well before registration deadlines.

To my knowledge, a project title submitted by a professor for any PHY fourth-year project courses has never been denied or excluded or even questioned before it is included in the information to registering students or before it can be offered. This is of note because my physics department prides itself on interdisciplinarity and has in the past hosted fourth-year projects in a range of areas as broad as astronomy, biophysics, cell wall structure, polymer chemistry, geochemistry, environmental science, information theory, neural networks, artificial intelligence, and machine learning, solid state physics, materials science, measurement methods of all sorts, mineralogy, petrology, sediment diagenesis, perception and neural function, medical physics, high-energy physics, electronic device characterization, instrumental development for applications outside of physics, high-pressure geoscience, etc. In addition, accepted research methods used in PHY fourth-year projects include: bibliographical searches, analytic theoretical work, computer programming, all experimental measurement types whether predominantly used by physicists or not, instrument design and fabrication, all chemical synthesis and material fabrication methods and their development, field work (e.g., collecting samples, observations, etc.), statistical analyses, data mining methods, etc.

#### PROJECT TITLE AND TOPIC REJECTED

In this case, my project title “Politics and Ethics in the Physics Profession” was denied and the chairman barred it from being included in the list of projects available to students for the fall 2007 start of the academic year.

These titles are normally meant as guides to students to encourage them to speak to the professor about the nature of the project. I had included background URL links illustrating some of my political perspectives in the area of my project title. The title also represents one of my ongoing research interests as a professional physicist.

Nothing in the Senate-approved course description for PHY 4006 would exclude my proposed research project topic. PHY 4006 is not a lecture or laboratory course with several sections (it is a project course in individual research groups) and its CONTENT has never been coordinated as such to ensure “common didactic materials” (21.1.2(b)) or to ensure curriculum uniformity of any kind. Its main aim has always been to expose students to research, in an active research group (although non-funded researchers and non-Graduate Faculty members have been allowed to supervise projects), in an area that can be useful to a graduating professional physicist. Physicists pride themselves on being exceptionally versatile and physicists work in all areas of the service, government, educational, and corporate sectors.

#### BOGUS ARGUMENTS USED / BIASED TREATMENT

To have the position (shared by the dean and my chairman) that physicists cannot legitimately do research as professional physicists in the area of the politics and ethics of their own profession is absurd. Disciplinary divisions are useful in organizing curricula and in facilitating specialization but they are not meant as arbitrarily applied barriers to prevent new areas from being developed or interdisciplinary avenues from being practiced.

Several criteria for beneficial fourth-year research projects offered to physics students by a physics department can be advanced. For example, one can point out that research into the pedagogy of physics is performed by physics professors in physics departments (and funded by the NSF) on several campuses in the USA. UBC has recently hired a physics Nobel laureate (Carl E. Wieman) to head a research group in the pedagogy of science. One of my former graduate students is an Associate Professor and physics pedagogy researcher in the Physics Education Group, Department of Physics, University of Washington. Using the logic of my chairman and of the dean (dean's letter dated July 27<sup>th</sup>), such a group would be characterized as "doing pedagogy applied to physics and not a project in physics" and its members would not be allowed to supervise physics research projects with titles such as "pedagogy of physics".

Another erroneous argument that has been implicitly advanced by the dean and my chairman is that a PHY-code course (a "physics course") must confine itself to (undefined) "physics content". This is an example of a regressive application of disciplinary boundaries, and it is false in current practice. Several PHY-code courses are effectively mathematics courses, just as some ENG-code courses are classic introductory physics courses, etc. In fall 2005 a PHY-code special topics course entitled "Science and Society" was offered after unanimous approval by the physics Departmental Council. The SCI 1101 Science in Society course is a Faculty of Science course that looks at the societal aspects of "Science in Society", etc. Disciplinary divisions are meant to facilitate not arbitrarily impede. Academics should not lower themselves into using disciplinary divisions for political or ideological control, as was done with industrial specialization of labour to control the workforce.

An argument in favour of interdisciplinary physics projects is based on the PACS codes (see the email of Professor Ivan L'Heureux dated July 16<sup>th</sup>, below). "The Physics and Astronomy Classification Scheme® (PACS) was developed by the American Institute of Physics (AIP) and has been used in *Physical Review* since 1975 to identify fields and sub-fields of physics." (<http://publish.aps.org/PACS/pacsgen.html>) These codes are a standard in the physics profession and include such varied topics as:

- 89.20.Dd Military technology and weapons systems; arms control
- 89.20.Hh World Wide Web, Internet
- 89.60.Fe Environmental regulations
- 89.65.-s Social and economic systems
- 89.65.Ef Social organizations; anthropology
- 01.40.Fk Research in physics education
- 01.75.+m Science and society
- 01.78.+p Science and government

Based on this and on the many physics conference talks and physics journal papers that deal with such topics, clearly, the physics profession considers it legitimate for physicists to work in these areas. In this light, the chairman's answer to Professor L'Heureux (dated July 17<sup>th</sup>, below) and the dean's decision (having been informed by me: July 17<sup>th</sup> email, below) appear to be a shameful example of bias against me.

(It is interesting to speculate whether or not my chairman and the dean would have rejected my project had it been in PACS area 89.20.Dd: Military technology and weapons systems.)

The main criterion for fourth-year research projects should be benefit to the graduating physics student wishing to contribute optimally to some sector of the economy and to the betterment of society. In this regard, the topic “politics and ethics in the physics profession” is eminently suited. History has shown the disastrous effects that occur when scientists leave it to others to decide on the societal implications of their work. There is presently no course on ethics or societal implications in the physics curriculum.

My views on the physics profession are published and are very critical:

<http://www.globalresearch.ca/index.php?context=viewArticle&code=20060904&articleId=3140>

I have been criticized in my department for these views.

My views on the societal impacts of science are radical and have been criticized by many colleagues in the Faculty of Science, in relation to my delivery of SCI 1101.

It appears that some of my physics colleagues and the dean have attempted to limit my academic freedom (9(a)) and have discriminated against me for my political views and research interests (10.3.2(g)) by disallowing my PHY 4006 project topic.

#### **ACTIONS VIOLATE THE CA / FOLLOWING A DOCUMENTED HISTORY OF EMPLOYER HARASSMENT**

Irrespective of their motives, it is clear that these colleagues and the dean have inhibited the free exchange and dissemination of ideas or information and deliberately interfered with my performance of workload duties (10.3.2(e)), have interfered with my rights and responsibilities in delivering PHY 4006 (21.1.2(b)), and have effectively changed my workload after May 1<sup>st</sup> without prior consultation and without just cause (22.2.4.4).

At the time of filing this grievance, damage has already been done and by the time the Step-1 is scheduled (given recently observed employer delays) the academic term will be well underway. The dean’s resilience to my plea (July 18<sup>th</sup>) and his position in the face of the facts presented to him, at the very least suggest an exceptional lack of judgement that is itself evidence for bias against my person, in view of the history documented in my past grievances (G-9 and G-10 attached below).

#### **In reparation, I ask:**

(1) That the dean apologize to me in writing for his lack of judgement in excluding my PHY 4006 project topic,

(2) That the dean apologize in writing, with cc to me, to all the students who were eligible to register for the PHY 4006 course or its 3-credit version in the fall 2007, for having incorrectly excluded the “Politics and Ethics in the Physics Profession” project topic as an option,

(3) That the dean inform all professors in the Department of Physics, in writing, that PHY 4006 projects of the type “politics and/or societal interactions and/or ethics in the physics profession” are legitimate PHY 4006 project topics that should not be discriminated against using disciplinary or other arguments,

(4) That accommodation be made in my next two workloads, in consultation with me, such that I can supervise two PHY 4006 students (thereby doubling the average workload for this course),

(5) That the dean officially investigate and reprimand the chairman, Bela Joos, and the professor responsible for coordinating the PHY 4006 projects, Peter Piercy, for their interventions that violated my rights, freedoms, and responsibilities under the Collective Agreement, and

(6) Given that the dean’s actions indicate bias and appear to be politically or ideologically motivated, in view of the history documented in my previous grievances, I ask that he be asked to resign.

Please allow me to remind you (13.4.2) that the employer must convene a Step-1 mediation meeting within 10 working days. You should contact me directly for this purpose as I have asked the APUO not to be involved in any way in the first step of this grievance, except to provide a silent observer at the Step-1 meeting. Therefore, you should not discuss the content of this case with the APUO until the grievance falls under its responsibility.

Sincerely,

Denis Rancourt  
(Professor)  
Department of Physics

cc: APUO, INTRA and by e-mail.  
cc: Dean of Science, INTRA and by email  
cc: All professors in Physics, by email  
cc: All Physics students, by email  
cc: Made public