

Faculty of Arts & Science, Department of Physics, Engineering Physics & Astronomy Faculty Workload Standard

1 Preamble

The Department of Physics, Engineering Physics & Astronomy is committed to research excellence and to providing a high quality education to the undergraduate and graduate student population. Excellence in research and teaching in the department has been recognized by national and international awards including the 2015 Nobel Prize in Physics and the 3M National Teaching Fellowship. In the 2017-2018 academic year, 221 students were enrolled in the Engineering Undergraduate Physics program, 122 students were enrolled in the Arts & Science physics major and SSP programs, 1628 students were enrolled in first year physics courses (A&S and engineering combined), and 79 students were enrolled in the graduate physics program. Furthermore, 31 undergraduate students were hired in the department to participate in course development and research activities during the summer 2018. Consequently, the department is one of the largest physics/engineering physics departments in the country. Members of the department are committed to providing a diverse, equitable, and healthy work environment that continues to foster excellence in teaching and research. The purpose of this document is to have guidelines in place that help to ensure a fair and collegial workload distribution among the faculty members in the department.

Every faculty member is expected to participate in the life and general well-being of the department. This is accomplished through high-quality research and the production of scholarly works, teaching, and administrative and professional service. Normal workloads for faculty with a full range of academic responsibilities (called “regular faculty” below) are described below, and adhere to a “40/40/20” distribution (40% research, 40% teaching, 20% service) with variations specified in individuals’ letter(s) of appointment. It should be recognized, however, that circumstances may dictate variations from these norms between individuals and also for a given individual from year to year. It is the Head’s responsibility to ensure overall fairness between faculty members, and to solicit input from the members on their proposed responsibilities for a given year.

2 Resources and Allocations in the 2017-2018 Academic Year

The tables in the Appendix provide a snapshot of the department and faculty responsibilities in the 2017-2018 academic session. For the purpose of teaching loads, one “standard teaching unit” (STU) corresponds to one typical course (3 lectures per week) taught for one 12-week term. Regular faculty were expected to teach 3 STU per year during the year that the data were compiled. Section A.1 shows the workforce, section A.2 shows the teaching responsibilities for members of the department, and section A.3 shows the administrative responsibilities for members of the department.

3 Normal workloads

Sections 3.1 to 3.3 describe normal activities and workloads for the department.

3.1 Research

All regular faculty members are expected to participate in high-quality research and/or the production of scholarly works and the supervision of graduate students. Faculty are also encouraged, when funding permits, to supervise undergraduate students for summer (or work term) research experiences. Examples of scholarly work include scientific papers and books, writing and receiving internal and/or external grants and awards, attendance and presentation of research results at conferences, participation or organization of summer and winter schools, invited conference talks and colloquia, refereeing the work of colleagues, editorships for journals, writing of textbooks, collaboration with industry and general participation in the profession.

3.2 Teaching

Faculty with a full range of academic responsibilities are expected to teach three (3), standard teaching units (1 STU = 0.5 full course equivalents “FCE”). A “standard teaching unit” (STU) is defined to correspond to one typical 12-week term graduate or undergraduate course (e.g. three 50-minute lectures per week or equivalent online or blended course + associated tutorials and laboratories). It is understood that the duties associated with each course, as dictated by the need for each course, may also include the necessary preparation and/or delivery of tutorials, laboratories, preparation and

delivery of assignments and examinations, grading, coordination of teaching assistants and graders, and meeting with students. The duties associated with each course shall be clarified with the Head at the time of workload assignment.

When assigning teaching loads, through consultation with the concerned faculty member, the Head may also take into consideration the demands of a particular course and may occasionally give a course a weight that is different than 1 STU. Reasons to weight a course as more than 1 STU can include factors such as teaching a new course (including an online course) or teaching an existing course for the first time, teaching a course with a substantial laboratory component (that requires a significant professorial contribution) in addition to lectures, or teaching a course with a substantial administrative component (e.g. large class). Some courses may also be weighted less than 1 STU. Reasons to weight a course as less than 1 STU include teaching a course that has less contact time with students than a typical course, or courses where the faculty's main responsibility is organizational (e.g. fourth year theses, graduate seminar), or a continuing online course where material has already been prepared.

In general, the Head shall discuss with the member of the department whether a course that would be weighted heavier than 1 STU could be weighted as 1 STU with the provision of additional resources, such as graders, teaching assistants, or academic assistants.

Regular faculty members are also expected to be actively engaged in supervising and examining undergraduate theses. In the 2017-2018 academic session, 51 engineering students and 11 Arts & Science students wrote theses. Normally, the number of undergraduate theses supervised will be distributed equally amongst faculty. However, faculty who are supervising a large number of graduate students (relative to the Departmental average, currently 2.8 graduate students/faculty) may ask to supervise fewer than the average number of undergraduate theses. Conversely, faculty who are supervising very few graduate students (relative to the Departmental average) can be asked to supervise more than the average number of undergraduate theses.

The teaching load in any given year for faculty who are regularly engaged in research should not exceed 3 STU (including both undergraduate and graduate courses), unless agreed upon by both the Head and the faculty member. However, at the Head's discretion, faculty who are not actively engaged in research on an ongoing basis may be required to teach more than 3 STU. Note that a faculty member's research funding is not the sole indicator of research activity and that all activities listed in section 3.1 should be considered when evaluating an increase of teaching load.

Short term deviations from the teaching workload may occur under some circumstances; e.g., significantly higher or lower loads under Sections 3.1 or 3.3. Full and half sabbatical leaves shall be weighted accordingly; two half sabbatical leaves shall receive the same teaching relief as one full sabbatical. Faculty members are expected to participate in undergraduate teaching, regardless of exceptional activities in other areas.

Short term deviations from normal loads are specified in Articles 37.4 and Article 26 of the 2015-2019 Collective Agreement. The Head may temporarily adjust teaching and service loads in response to individual circumstances, such as heavy involvement in curriculum development, major projects, specific research requirements, or a very high level of graduate student supervision.

3.3 Service

Subject to Article 15.5 of the Collective Agreement, examples of service would include: participation in departmental committees, thesis examination committees, university committees, external professional committees, delivery of public lectures, and/or the administration of public programs. Regular faculty members are expected to participate in departmental committee work. It is recognized that a wide variation in committee workload exists, depending on the committee, whether at a departmental, university, or external level.

Certain administrative service duties require a significant commitment of time and may result in a reduction in teaching load; e.g., the position of Head (normally 2 STU reduction), Undergraduate Chairs (normally 1 STU reduction), and Coordinator of Graduate Studies (normally 1 STU reduction). This may also be the case for some external committees;

e.g., membership on an NSERC Evaluation Group). Faculty members should discuss potentially major time-consuming commitments with the Head before taking on such external duties.

APPENDIX

A.1 Resources and Allocations in the 2017-2018 Academic Year

Category	Number	Notes
Faculty with a full range of academic responsibilities	27	Includes all tenure and tenure-track faculty except continuing adjuncts and IPP scientist. (0.5 from joint-appointment with Chemistry and 0.5 for faculty retiring mid-year)
Continuing Adjuncts	2	Higher teaching load
IPP Scientist	1	No teaching requirement, supervises graduate and undergraduate students
Faculty with some teaching relief	15	4 with 1 STU relief (UG Chairs, Coordinator of Graduate Studies, other), 11 with 2 STU relief (Research chairs, head, assoc dean, QUFA, other, and 4 new faculty with reduced teaching load in their first year)
Faculty with teaching overload	1	Teaching more than 3 STU
Faculty on sabbatical	6	Faculty with a full range of academic responsibilities on sabbatical (2 on full sabbatical)

Table A.1: Overview of the department workforce in the 2017-2018 Academic Year.

A.2 Courses taught and teaching capacity

A.2.1 Courses taught

Category	STU	Notes
Undergraduate courses	64	29 Fall and 35 Winter
Graduate courses	6	Excludes cross-listed with undergraduate
Total	70	

Table A.2.1: Courses taught in the 2017-2018 Academic Year.

A.2.2 Teaching capacity

Category	Number	Notes
Faculty with a full range of academic responsibilities	+81	27 faculty at 3 STU per year
Continuing adjunct faculty	+12	2 faculty at 6 STU per year
Teaching relief from additional research or administrative loads	-17	Relief by position: Head (2), CERC (2), CRC-1 (0.5), Research Chair (0.5 this year), ENPH Undergraduate Chair (1), A&S undergrad chair (0) ¹ , Coordinator of Graduate Studies (1), Endowed chair (1), Assoc. Dean (2), QUFA (2 + 1), McDonald Institute Director (2), Course owed from previous year (1), CIFAR buyout (1)
Junior faculty teaching relief	-8	4 junior faculty being ramped up to 3 STU over the course of 3 years
Overload	+2	1 faculty teaching 2 extra STU

¹ The faculty serving as A&S Undergraduate Chair this year already received 2 STU of teaching relief and, consequently, did not receive additional relief associated with the heavy administrative load of this position.

Sabbatical	-11	2 faculty on full sabbatical and 4 faculty on half sabbatical
Total capacity	59	

Table A.2.2: Teaching capacity in the 2017-2018 academic year.

In the 2017-2018 academic year, 11 teaching STU were taught by term adjunct faculty.

A.3 Administrative responsibilities within the department

The data below show the current administrative duties associated with the department. It should be noted that this is not a comprehensive overview of all of the service activities in which members of the department are involved and that the structure and number of committees can change from year to year.

A.3.1 Continuing administrative roles

- Department Head
- Associate Head
- Engineering Physics Undergraduate Chair
- Arts & Science Undergraduate Chair
- Chair of Graduate Studies

A.3.2 Standing departmental committees

Table A.3.2 lists the current core standing committees in the department. This does not include various ad-hoc committees, Ph.D. supervisory committees, and undergraduate theses examination committees that are formed during the year to meet the needs of the department. The table also does not capture the added load of engineering faculty that are required to be on engineering thesis examination committees and supervise APSC 100 projects.

Committee	Number of members	Notes
PRTC/Appointments	7 + head + 1 admin	Head + 1 serve on appointments only. Members are elected. 1 member is continuing adjunct
Planning	4 + head	Head chairs committee
Graduate Steering	8 + 1 admin	
Arts & Science Curriculum	4 + 1 admin	
Applied Science Curriculum	4 + 1 admin	
Space	4+ head + 1 admin	Head chairs committee
Outreach and web	4 + 1 admin	
Colloquium	4	
Safety	2 + 3 admin	
CEAB accreditation/Graduate attributes	4 + 1 admin	
Prizes, awards, scholarships	4 + 1 admin	
Total	47 + 11 admin	

Table A.3.2: Standing departmental committees in the 2017-2018 Academic Year.

BC

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May 15 / 2019

Date