

## Overview to the Biology Workload Standard Document

Each Department is required to develop a Workload Standard document that informs faculty members about workload expectations. This preamble is provided to Biology faculty and distributed with the workload standard document. It serves mainly to provide general information about the role of the document as well as additional information that elaborates on aspects that are more unique to Biology, either cultural or historical. Faculty are encouraged to review the sections relevant to workload in the Collective Agreement (CA) between the University and QUFA (Section 37 of the 2015-19 CA). Many documents impinge on the academic workplace and take precedence over any policies adopted through this document.

In drafting the recent workload Standards, there were a number of guiding principles that Members considered important, but did not fit easily into the expected framework of the document. As an alternative, these principles are articulated here to ensure that they remain part of the Biology culture.

- Biology is committed to respecting the policies in the QUFA CA and government legislation. Members of Queen's Biology seek to develop a diverse, fair, and collegial working environment, and follow the guidance set out by the current CA, which states: "Consistent with the principles of employment equity, the University shall act to eliminate or modify those policies, practices, and systems, whether formal or informal, shown to have an unfavourable effect on the hiring, retention and promotion of members of equity-seeking groups, and to recognize the value that diversity adds to the academic activities of the University".
- The Workload Standard framework does not change as faculty progress through the ranks. All faculty have the same range of responsibilities required for promotion, tenure, and merit. However, expectations for research and service typically increase as faculty progress through the ranks. Our teaching, research and service activities are built on the principle of a 40:40:20 split. The CA permits a member to negotiate a deviation from an annual 40:40:20 ratio. Such negotiations are conducted with a member's immediate supervisor, typically the Head.
- The most common trend in deviations from this 40:40:20 split is when scholarly research activity falls below expectations. Faculty who experience a sustained decline in research activity may negotiate with the Head for a change in the 40:40:20 formula to reflect the change in workload. If the research activity of a faculty member is consistently below expectations, the Member should expect to be assigned a greater than average teaching load and/or administrative load.
- Many Biology faculty have cross appointments with other departments. These activities are valuable, and recognized through the merit process, but the Workload Standard focuses specifically on a faculty member's activities within the Department of Biology. These activities do not typically count toward calculation of Biology workload.
- With new appointments, the Department has a history of ramping teaching to enable the new faculty member to focus on research in the early years. Specific expectations may vary depending on the career stage of the new faculty member, but the departmental culture is that new faculty members should be assigned teaching in a manner that supports them in establishing a successful research program.

**DRAFT of REVISION Nov 2018**  
**DEPARTMENT OF BIOLOGY WORKLOAD STANDARD**

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## DEPARTMENT OF BIOLOGY WORKLOAD STANDARD

This **Workload Standard** informs faculty members about workload expectations and it ensures that it achieves this goal with transparency. It gives faculty information on workload in a context specific to the Department of Biology. It describes the approach used to make quantitative comparisons in workload elements as a means to promote equitable workloads between faculty members and to track teaching over a 5-year period for purposes of workload averaging. It explains the mechanisms and priorities used by the department to assign teaching such that it meets its program obligations.

### 1.0. Academic responsibilities and the nature of a typical workload

Biology faculty are salaried employees and as per the Employment Standards Act, there is no formal requirement for number of hours in a workweek. Likewise, the current Collective Agreement does not stipulate the number of weeks of vacation permitted. Thus, it is impossible to provide specific information on how many hours per week or year faculty are expected to devote to specific activities. Instead, this Workload Standard provides general guidelines about what is expected of individual faculty fulfilling their teaching, research, and service obligations.

#### 1.1. Workload

**1.1.1. The 40:40:20 Split.** Under the current CA, there is no mandated division of workload between teaching, research, and service. This Biology Workload Standard is based upon the historical tradition of a 40:40:20 split between teaching, research, and service.

**1.1.2. Annual Expectations.** The nature of typical activities varies widely and unpredictably for faculty on a week-to-week basis. Due to the nature of assigned teaching, faculty typically have weeks where teaching duties are very time consuming and other weeks where teaching duties are lighter. Thus, there is no expectation that a faculty member maintains a 40:40:20 ratio on a weekly basis, though faculty should strive to achieve this balance on an annual basis.

**1.1.3. The 37.5h week.** Faculty are salaried personnel and there is no formal requirement for number of hours in a workweek. Nonetheless, Biology workloads are based upon expectations that a typical workweek is 37.5h. It is a reasonable expectation that faculty limit their teaching related activities to 15h per week, averaged over the year. However, it is common practice for faculty to invest more than an annual average of 22.5h per week in research and service.

**1.1.4. Equity considerations.** In assigning responsibilities for teaching and service, the Department of Biology strives for equivalent expectations amongst faculty. In some cases, faculty who are part of an equity-seeking group may experience specific burdens associated with activities that promote equity. Faculty who are from equity-seeking groups who find themselves overcommitted as a result of such demands may discuss with the Head means to recognize these activities and adjust other assigned duties as needed.

#### 1.2. Teaching Load Expectations

**1.2.1. Teaching in a 37.5h week.** Faculty are advised to adopt practices that ensure that their teaching efforts fall within the recommended guidelines for time investment: 15h per week, averaged over the year. In some cases, faculty feel the need to devote all of their available

workweek to teaching activities. For example, Biology offers some short-term, intensive courses that are designed in a manner that precludes other activities and may even exceed the recommended limit of 37.5h per week. Since the credit for such courses is calculated as with any other course, faculty should strive to limit their time investment accordingly, when averaged over an appropriate time frame.

**1.2.2. Adjustments in Calculating Teaching Credit.** This workload document makes an effort to quantify teaching effort using a system of base credits (3.0 teaching units for a 3.0 Unit course, equals one half course or 0.5 Full Course Equivalent (FCE)), with adjustments for teaching responsibilities that merit additional credit. Faculty seldom agree on which features of two equal weight courses make one more demanding than another, and indeed one member may find certain aspects of teaching more demanding than others do. Recognizing these issues, the department agrees to use the following guidelines in assigning equitable teaching loads. The year-to-year variations in teaching load should be minimized as much as possible, but there is an expectation that any five-year average teaching load falls within the departmental norm. Members are encouraged to discuss details of their teaching assignment with the Head or Associate Head, who may suggest alternatives to these guidelines in special situations.

**1.2.3. Assessing Teaching.** This document outlines the expectations for teaching in terms of workload, but it has no position on what constitutes teaching quality. Exceptional teaching achievements are identified and acknowledged through the merit process.

### **1.3. Research Expectations**

**1.3.1. Changing Research Intensity.** The nature of faculty research activity is expected to vary between members, depending on research discipline, stage of career, availability of research funds and facilities, etc. In the absence of an agreement to change the 40:40:20 approach, faculty who demonstrate a long-term reduction in research should expect increases in assigned teaching or service duties. Greater-than-average research activity does not automatically merit a lower-than-average teaching load, but may warrant discussion of available options with the Head.

**1.3.3. Assessing Research.** This document outlines the expectations for research in terms of workload, but it has no position on what constitutes research quality. Exceptional research achievements are identified and acknowledged through the merit process.

### **1.4. Service Expectations**

**1.4.1. Changing Service Contributions.** The nature of faculty service activity is expected to vary between members, depending on stage of career, interests in administration, and relationships with internal and external professional associations, etc. In the absence of an agreement to change the 40:40:20 approach, faculty who demonstrate a long-term reduction in service should expect increases in assigned teaching. Greater-than-average service activity normally does not merit a lower-than-average teaching load, but in special situations faculty should discuss options with the Head.

**1.4.2. Assessing Service.** This document outlines the expectations for service in terms of workload, but it has no position on what constitutes quality of service. Exceptional service contributions are identified and acknowledged through the merit process.

## 2.0. Teaching Activities

Biology teaching activities can be categorized as assigned and informal teaching. Assigned teaching includes formal undergraduate and graduate courses. These are assigned by the Head or Associate Head through the Teaching Plan. Informal teaching activities are an important part of academic program obligations, but are distinct in that they arise from choices made by the faculty member. This includes informal undergraduate supervision, such as independent studies, as well as graduate student supervision. Although faculty members serving on undergraduate and graduate committees make important contributions to informal teaching, there is no formal recognition of these activities in calculating teaching load.

### 2.1. The Role of the Teaching Plan

**2.1.1. The Final Teaching Plan.** Faculty are given their assigned teaching duties (undergraduate and graduate) through release of a Teaching Plan. It is provided to the department in May, as stipulated by the CA. The Teaching Plan covers assigned teaching for the Academic Year: Fall, Winter and following Summer. **Appendix 1** provides example calculations for assigned teaching. In practice, the final Teaching Plan consists of one spreadsheet listing assigned teaching duties for each faculty member, and a second that lists faculty assignments by course. Periodically a third spreadsheet summarizing total teaching loads may be produced for planning purposes, taking into account all activities related to teaching including assigned undergraduate and graduate courses (with adjustments) and informal supervision.

**2.1.2. Consultation on the Teaching Plan.** The expectation is that the Head or delegate consults broadly within the department in developing the Teaching Plan though there is no requirement to do so. Preliminary versions of a teaching plan may be distributed, but the plan is considered tentative until a final plan is distributed in May and advertised as such.

**2.1.3. Historical Perspective.** Teaching plans should include comparative historical data and forward projections such that 5-year averages can be calculated over multiple periods. It is commonplace that faculty have reduced or elevated teaching activity in a particular year, but the expectation is that the 5-year average falls within a typical departmental range.

**2.1.4. Corrections to the Teaching Plan.** The Teaching Plan is updated regularly to correct calculations for courses that were cancelled, and modify the credit when the values for adjustment factors change as a result of enrolment updates. Also, calculations of credit for informal teaching is typically performed late in the academic year, once supervisory activities are solidified.

**2.1.5. Consideration of Informal Teaching.** In any given year, calculations for informal teaching (i.e., undergraduate and graduate supervision) are uncertain but can be retroactively calculated once the academic year comes to a close. These contributions do not typically affect assigned teaching on a year-to-year basis. However, where faculty have unusually high or low informal teaching, an anomalous 5-year average can be used as justification for a compensatory change in assigned teaching for a given year.

### 2.2. Assigned Undergraduate Teaching

**2.2.1. Teaching course variants in summer and online.** Unlike many departments, Biology offers many courses in the Summer term. Assigned teaching in the Summer should not place

undue hardship on research activity, and faculty cannot be compelled to teach in three consecutive terms within an academic year. However, faculty may choose to teach in three consecutive terms as part of their long-term plan. Online course variants are becoming more common and like summer courses, there is overlapping responsibility between Biology and Continuing and Distance Studies (CDS) for their development and delivery. Subject to negotiation with the Head, faculty may ask to have summer and online teaching counted as part of their assigned teaching duties, or as overload funded by CDS. The Biology Appointments Committee has developed policy on assigning and compensating course variants, and such policy together with this Workload Standard are likely to evolve as teaching outside the traditional fall and winter in-class format becomes more common.

**2.2.2. Practical courses.** Practical courses (field courses, laboratory courses) are a priority for the Department, providing unique undergraduate learning opportunities essential to the Biology program. Faculty members are encouraged to contribute to these courses as part of their regular assigned teaching. Due to the nature of such courses, faculty may decline requests to teach courses with travel requirements or atypical scheduling, such as two-week intensive courses.

**2.2.3. Scope of Teaching Activities.** Activities involved in undergraduate teaching typically include:

***Promoting Teaching Excellence***

- participating in teaching workshops to ensure that Faculty are aware of the latest technologies and methodologies
- engaging within the Department to develop curriculum and courses

***Developing and Delivering Courses***

- regular reviewing to ensure that courses remain topical in content
- regularly developing laboratory, tutorial and field exercises
- developing learning tools in conjunction with the Learning Management System
- preparing and presenting formal lectures
- preparing self-directed learning activities
- developing in-class activities to promote active learning
- delivering laboratories, tutorials and field instruction
- advising students and responding to student enquiries about the course and its requirements

***Managing Courses***

- preparing and conducting evaluations consistent with best practices that promote academic integrity
- evaluating student assessments in a timely manner
- maintaining an accessible gradebook to ensure that students are able to assess their current standing
- training and supervising teaching assistants, including preparation of job descriptions.
- working with Program Associates within the constraints of their individual job descriptions
- providing to the department a current course syllabus and other course information as required
- maintaining an up-to-date course website to advertise the current version of courses
- resolving technical issues with the website and learning management system as they arise

- accommodating students with special circumstances, including arranging for alternate evaluations and activities as needed

**2.2.4. Availability during Exams.** Faculty must be available during examinations, either in person or by telephone. Where more than one faculty member teaches a course, it is the responsibility of the course coordinator to ensure that at least one faculty member is available during the examinations, either in person or by telephone.

**2.2.5. Rotating Through Courses.** It is expected that all faculty will be at least periodically assigned teaching within the Biology core. To fulfill this expectation, faculty should be prepared to teach core courses in the broad subject areas that encompass their expertise. Likewise, faculty may be rotated out of courses to meet broader departmental teaching needs.

**2.2.6. Teaching Courses Outside of Biology.** Some faculty are involved in teaching courses outside the department, typically meeting expectations for cross-appointments. This document does not include these activities in the Teaching Plan and they do not affect the calculation of workload. Such activities are important to the institution and are recognized through the merit process.

### **2.3. Assigned Graduate Teaching**

**2.3.1 Contributing to Graduate Courses.** Graduate student training is an important activity within the department, and all faculty are expected to participate in teaching formal graduate courses, regardless of whether or not they have graduate students under their supervision.

**2.3.2. Graduate Courses and the Teaching Plan.** One formal graduate course is assigned, on average, every other year. Faculty who do not teach graduate courses should expect assigned undergraduate teaching to increase proportionately.

**2.3.3. Graduate Course Activities.** Activities involved in graduate course teaching may include any of those listed above for undergraduate teaching.

**2.3.4. Scope of Graduate Courses.** Faculty should ensure that the subject matter of their graduate course assignment is broad enough to interest at least 5 students. If the course fails to recruit 5 students, the teaching credit is diminished. Directly or indirectly, graduate student course enrolment is credited to the department, so calculations are based on course enrolment, irrespective of the department in which the graduate student is enrolled. Conversely, the department receives no credit for faculty who teach in non-Biology courses.

### **2.4. Informal Undergraduate Supervision**

**2.4.1. Independent Studies.** Courses such as BIOL537-541 and BIOL59X involve intensive individual instruction and consultation centred on a student research project. Faculty cannot be required to be involved in Honour's thesis or independent studies supervision, but these activities are part of Biology's academic program obligations and thus contribute to the calculation of total annual teaching loads. Supervision of each independent study student gives a credit of 1.2 units (0.2 FCE), up to a maximum of 3 students (3.6 units or 0.6 FCE).

**2.4.2. Supervision of Undergraduates from Outside Biology.** Many faculty take on supervision of students who are enrolled in mentorship courses of other departments. Biology receives no credit for this teaching, and thus, these contributions are not considered part of a typical Biology teaching load. However, students from other departments taking Biology mentorship courses count toward informal teaching calculations for their Biology supervisor.

**2.5. Graduate Supervision**

**2.5.1. Direct Supervision of Biology Graduate Students.** In addition to assigned teaching of graduate courses, faculty supervise graduate students typically as part of their research program. Such graduate supervision includes activities such as discussions with individual students, lab group meetings, and journal club meetings. While these activities benefit research activity of the faculty, they are also treated as informal teaching and incorporated into the calculation of total teaching load. Supervision of each graduate student gives a credit of 1.2 units up to a maximum of 3 students (3.6 units).

**2.5.2. Participation in Graduate Committees.** Faculty should also regularly contribute to comprehensive and defence examinations as Examiner, Chair, or Head’s delegate.

**2.5.3. Supervision of Graduate Students from Outside Biology.** Many faculty supervise graduate students registered in departments other than Biology. Such students are not counted as informal graduate teaching in workload calculations, but are reported in the merit process.

**2.6. Calculating Teaching Load**

**2.6.1. Base Credits in Workload.** Calculation of credit for assigned teaching is expressed as the base credit for a course and adjusted for various factors deemed to be significant in delivery of a course.

| Teaching                                | Base Credit      |
|---|------------------|
| 100% of a 3.0 Unit Undergraduate course | 3.0              |
| 100% of a 1.5 Unit Undergraduate course | 1.5              |
| 100% of a 3.0 Unit Graduate course      |                  |
| Five or more students                   | 3.0              |
| Less than 5 students                    | 0.6 per student  |
| 100% of a 1.5 Unit Graduate course      |                  |
| Five or more students                   | 1.5              |
| Less than 5 students                    | 0.30 per student |

**2.6.2. Repeated Lectures in Courses with Multiple Sections.** Teaching credit in large enrolment courses with multiple lecture sections is awarded an additional 50% credit for each repeat of the lecture by the Member. Thus, a Member who teaches a 3.0 Unit course with 3 sections receives a credit of 6.0 (3.0+1.5+1.5).

**2.6.3. Large Courses.** The Department gives additional credit for faculty teaching larger courses because of the additional time that may be required for contact hours with students. The class size credit also serves to acknowledge faculty who face more complex logistics in classes with larger enrolment, such as special accommodations, multiple midterms, etc. However, this credit is balanced against the Department’s desire to encourage faculty to teach in the smaller-sized 3<sup>rd</sup>



and especially 4<sup>th</sup> year courses that provide an appropriate environment for student learning of the higher order skills outlined in our Department Undergraduate Mission Statement. Additional teaching credit based upon class size will be applied using the guidelines below.

| Course Enrolment | Class Size Credit |
|------------------|-------------------|
| >200             | 1.3               |
| 101-200          | 1.1               |
| 51-100           | 0.9               |
| 33-50            | 0.6               |
| 20-32            | 0.3               |
| <20              | 0.0               |

**2.6.4. Coordinator Activities.** Managing a course is part of the regular duty of faculty who teach a course. However, additional burdens are placed on individuals responsible for coordinating courses that are particularly large, or by their nature, merit additional teaching credit. Coordinator credit takes into consideration class size, but it is also influenced by whether or not the course has a lab component and/or a Program Associate.

**2.6.5. Courses with Labs.** Courses with formal labs require input from faculty associated with the course. The Coordinator for a course with labs is awarded additional credit (0.6) to compensate for the additional time required to design and regularly modify labs.

**2.6.6. Influence of Program Associates.** The nature of the coordinator and lab credits depend on whether a course has a Program Associate (PA). The PA has a job description defining the duties they can be assigned. Typically, PAs are responsible for delivering lab exercises in a course. It is common for PAs to carry out many duties associated with course coordination, such as managing the grade book and website, and responding to student issues in a timely manner. As a result, in those courses with a PA, the credit for course coordinator is diminished by 0.6. Coordinator credit for courses with and without labs and PAs is presented below.

| Course Enrolment | Coordinator Credit |              |              |
|------------------|--------------------|--------------|--------------|
|                  | - lab / - PA       | + lab / - PA | + lab / + PA |
| >250 students    | 0.9                | 1.5          | 0.9          |
| 100-249          | 0.6                | 1.2          | 0.6          |
| <100             | 0.0                | 0.6          | 0.0          |

**2.6.7 Budgeting Time for Teaching.** Faculty are expected to allocate their available time within the framework described in this Workload Standard. If a course requires more faculty time in one element, faculty normally reduce time spent in other elements as part of planning for the course. If the nature of the course is such that additional resources (e.g. TAs) are required, faculty should argue for more resources rather than an adjustment in calculated teaching load. However, in special situations such as introduction of a major new course element or use of an unusually time-consuming evaluation method, faculty should discuss options with the Head, who may decide that their assigned load should be adjusted.

## 2.7. Annual Teaching Load

**2.7.1. Typical Annual Teaching Load.** The typical teaching load takes into account all activities related to teaching including assigned courses (with adjustments) and informal supervision.

|  | Teaching credit |
|--|-----------------|
| <b>Assigned Teaching</b>   |                 |
| Assigned undergraduate courses (base credit plus adjustments)                | 7.8             |
| Assigned graduate courses (typically one course in alternate years)          | 1.5             |
| <b>Informal Teaching</b>   |                 |
| Independent studies (BIOL537-541, BIOL59X; assuming 2 students)              | 2.4             |
| Informal graduate teaching (assuming 3 or more supervised graduate students) | 3.6             |
| <b>Total typical teaching load (five year average)</b>                       | <b>15.3</b>     |

**2.7.2. Priority on Assigned Teaching.** Assigned courses take precedence over informal teaching to meet academic program obligations. All regular faculty should expect assigned teaching (undergraduate and graduate) of 9.3 units per year, averaged over 5 years.<sup>1</sup> A lower-than-typical teaching load in graduate courses may justify assignment of a higher-than-typical load in undergraduate courses, averaged over 5 years.

**2.7.3. Graduate Courses.** A lower-than-typical teaching load in graduate courses may justify assignment of a higher-than-typical load in undergraduate courses, averaged over 5 years. If a graduate course is unusually popular and in high demand from students, faculty may negotiate with the Head to offer the graduate course every year and receive a correspondingly lighter-than-typical teaching assignment in undergraduate courses, provided that the undergraduate program obligations of the Department can be met.

**2.7.4. Informal teaching.** A higher-than-typical load in informal teaching, in and of itself, does not justify a lower-than-typical teaching load in assigned courses. The impact of informal teaching (supervision of students in independent studies and a Biology graduate program) on total teaching load is assessed based upon the previous 5-year history. Faculty who have not maintained a typical load of informal teaching can expect a higher-than-average assigned teaching to reach the typical teaching load.

**2.7.5. Teaching relief.** A lower-than-typical teaching load in assigned courses may be negotiated if a faculty member is developing a new course, teaching an existing course for the first time, or undertaking a major revision of the curriculum for an existing course. Any such teaching relief is at the discretion of the Head, and should be recognized as specific teaching relief in the Teaching Plan spreadsheet.

## 3.0. Supervisory Load

There is a wide range of involvement in supervision of students and other highly qualified personnel depending on the size and type of research program. Detailed analyses of the diversity in training in each of the following categories is available in **Appendix 2**.

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<sup>1</sup> This value is based upon the 20-year pattern of teaching in the department and translates to an average teaching load of 1.55 FCE (9.3 units) using the scheme in place in 2016. See **Appendix 1** for the recent history.

### **3.1. Undergraduate Supervision**

Undergraduates often play many roles in a research program, mutually beneficial to the faculty member and undergraduate student. For the faculty member, undergraduates count towards training of highly qualified personnel. Undergraduates also contribute to lab operations as volunteers and part-time employees, participate in research and often become informal trainees for graduate students. Many undergraduates begin as volunteers, and with success in training goals, transition to Independent Studies positions, Honour's theses, and graduate students. As with any lab personnel, the faculty member bears the responsibility of ensuring that the undergraduate students receive the appropriate training and that the workplace is safe.

### **3.2. Graduate Student Supervision**

An active graduate training program is essential in the department because it is an important component of the research environment of a department. Directly or indirectly, graduate student enrolment has financial consequences for the department. Graduate students also take on the majority of Teaching Assistant positions, contributing to our undergraduate program.

Faculty members play an important role in supervision of Queen's Biology graduate students. Graduate student supervision is an important component in assessment of a faculty member's record in training of highly qualified personnel. Many members supervise students in other units, either through cross-appointments to other departments or adjunct appointments in other universities. However, this document places a priority on graduate students that are registered as Queen's Biology students.

Faculty are expected to participate in graduate student training within the department, although no faculty member can be compelled to take on individual graduate students or maintain a program of training graduate students. Graduate student supervision can be an important indication of whether a faculty member is has an active research program.

### **3.3. Graduate Student Supervisory Committees**

Each graduate student enrolled in a program requires additional faculty members to play a role in the supervisory committee. All faculty members are expected to actively participate on supervisory committees, whether they have a research program or not. However, individual faculty members cannot join a committee unless invited. Thus, the number of committees on which a faculty member serves cannot be used to indicate whether the faculty member is participating in the process. Committee members serve on supervisory committees to give guidance and technical assistance as needed.

### **3.4. Postdoctoral Trainees**

Postdoctoral trainees can play a vital role in a research program; however there is no expectation that faculty should have postdoctoral trainees in their lab. Faculty members who take on postdoctoral trainees should become acquainted with the institutional rules that govern their positions as employees within the unit.

### **3.5. Research Assistants**

Research assistants are staff members who are employed by faculty members to assist in research activities. As staff members, the university has explicit expectations in terms of

compensation, including benefits and severance. Faculty members who take on research assistants should become acquainted with the institutional rules that govern their positions as employees within the unit.

#### **4.0. Typical commitment to scholarly research**

##### **4.1. Research Time**

The workload standard is presented in a manner where the principle is to ensure that a typical faculty member has 40% of a workweek (i.e., 15h) available for research and other scholarly activities. The unpredictable nature of teaching means that there might not be 15h available for research every week, and thus these expectations are based on an annual average of the 40:40:20 split. Faculty commonly elect to work extended hours on scholarly research activities amounting to a total workload of greater than 37.5h per week on average, but they are not expected to do so.

##### **4.2. Research Activity**

Faculty whose appointments include the full range of academic responsibilities (Article 15.1.1), are expected to maintain an active research program. The following list provides examples of activities that may be part of an active research program.

###### ***Conducting research***

- supervision of highly qualified research personnel (graduate students, post docs, technicians)
- conducting activities in support of on-going grants or contracts
- administration of research budgets / grant accounts
- data analysis and interpretation

###### ***Disseminating Research Findings***

- publication of peer-reviewed papers
- writing and editing manuscripts for publication
- writing and editing of books for publication
- presentation of research in seminars
- presentation of research in conferences and symposia

###### ***Pursuing Research Opportunities***

- preparation of manuscripts for publication
- reading scholarly literature
- development of research proposals
- preparation of applications for research grants and contracts
- designing research apparatus and methodology
- collection of data
- development of theory

##### **4.3. Assessing Research Activities**

The workload document deliberately avoids articulating research expectations in terms of quantity of research produced. The number of publications expected from research-active faculty

varies widely among subdisciplines. But it is easier to make a compelling case for meeting expectations for research when tangible products of that activity exist. Of the categories listed above, those under Conducting Research and Disseminating Research Findings generate definitive products. New faculty seeking guidance on research expectations can compare profiles of other early stage faculty in their fields, and discuss discipline norms with peers or the Head.

## **5.0. Typical administrative service load**

### **5.1. Time Devoted to Service**

For Members whose appointment includes a full range of academic responsibilities and an assumed 40/40/20 distribution, total administrative work (including within and outside the University) should occupy a maximum of 20% of the time in a typical workweek (i.e. 7.5h per week) averaged over the calendar year. A detailed analysis of administrative load in each of the following categories is provided in **Appendix 2**. Annual reports are based upon a calendar year, and since most committee assignments begin mid-year, faculty report committee activities over two teaching years.

### **5.2. Letters of Recommendation**

Most faculty are called upon to provide letters of recommendation for undergraduate and graduate students. Requests for letters are not distributed homogeneously among faculty and the burden on individual faculty members can be formidable. Faculty are not required to provide letters for students, however facilitating the success of students after graduation is part of Biology's academic mission. Where faculty are fully committed to other responsibilities, they should consider declining additional requests. Faculty are encouraged to track effort put into letters of recommendation and report this activity in their annual report as part of service.

### **5.3. Departmental Standing Committees**

Standing Departmental Committee assignments are made by the Department Head. Most committee assignments begin July 1 and continue through June 30.

### **5.4. Personnel Committees**

Some committees are struck in conformance with the Collective Agreement and proceed along timelines contained therein. The committee making recommendations on progress through the ranks, currently the Renewal, Tenure, and Promotion (RTP) committee, begins duties May 15.

### **5.5. Faculty and University Committees**

It is expected that faculty will periodically serve in administrative roles at the Faculty and University levels.

### **5.6. Professional Service**

Most faculty are involved in service activities related to research and/or teaching, as defined in Article 15.5.2 of the CA. The following list is a compilation of the most common research and teaching service activities.

- serving as a journal editor
- serving as a member of editorial boards
- serving on government committees
- serving on company or non-profit organization boards
- serving on grant review panels
- serving on scholarship or fellowship review panels
- holding office in professional societies
- responding to public/media enquiries, providing enrichment to local school programs
- organizing conferences or workshops, for both professionals and the general public
- providing reviews for colleagues as part of the tenure and promotion process
- providing reviews for other academic units, including departments, faculties, and institutions
- manuscript reviews for journals, ad hoc grant reviews for colleagues

Depending on expertise and inclination, faculty may engage in many other professional and public activities, including a wide range of community service. Such professional service is treated in the same way as administrative service within the University, but faculty must ensure that their scheduled teaching and university service obligations are fulfilled.

### **5.7. Relationship Between Service and Other Contributions**

A greater-than-typical contribution to service does not, in itself, lead to reduced expectations in teaching or research.

### **6.0. Mechanisms for dealing with extraordinary tasks of administrative workload**

The nature of administrative duties within the department can be onerous and the burden may vary from year to year. As a result, the teaching relief provided for these positions should be negotiated between the Head and faculty member on a case-by-case basis. Any teaching relief negotiated should be specified in the teaching plan. The following are recommendations based upon current practice, and assuming that a typical teaching load is 9.3 units (7.8 units for undergraduate, 1.5 units for graduate courses).

#### **6.1. Teaching Relief for the Head**

The Head of Department typically receives teaching relief to alleviate the higher -than-typical administrative load. The Head should receive credit for 6.0 Units of teaching release, which approximates a teaching load that is 35% of a typical load.

#### **6.2. Teaching Relief for the Associate Head.**

The Associate Head is typically given teaching relief to address the higher -than-typical time commitments. Using guidelines based on recent practice, the Associate Head should receive a teaching release of 3.0 units, which approximates a teaching load that is 66% of typical. However, specific teaching relief is negotiated between the Associate Head and the Head.

#### **6.3. Teaching Relief for Major Committee Chairs**

The chairs of major standing committees in the department are typically given teaching relief to address the higher-than-typical time commitments. The specific teaching relief is negotiated between the Committee Chair and Head, using guidelines based on current practice. The Chairs of

the UGSC and BGSC should receive a teaching release of 3.0 units, which approximates a teaching load that is 66% of typical. However, specific teaching relief is negotiated between a Chair and the Head and deviations from these guidelines are possible, for instance if a major committee chair has a smaller-than-typical research program.

#### **6.4. Special Administrative Leaves**

Faculty with special administrative leaves may negotiate a reduced teaching load in assigned courses with the Head. Teaching relief should be identified on the Teaching Plan.

#### **6.5. Negotiated Teaching Release**

Faculty occasionally receive awards intended to be used to compensate the department for negotiated teaching release. This typically involves the faculty member requesting release from teaching specific courses and is accompanied by transfer of funds that enable the department to cover the teaching. Any such release requires approval by the Head, who may decline the request, for example, if suitable alternative candidates cannot be identified. Any negotiated teaching relief should be identified on the Teaching Plan.

#### **6.6. Reporting Teaching in an Academic Year with a Sabbatical**

In an academic year when the faculty member is released from teaching duties because of a sabbatical, the Teaching Plan should record the release as a teaching credit. Thus, a faculty who takes a half-year sabbatical should receive teaching relief of 4.65 units for that academic year.

### **7.0. Understanding Workload Expectations**

Many faculty, particularly new appointees, struggle to calibrate their efforts in the context of the broader department and in comparison to colleagues. Faculty should explore options such as those listed below to better understand workload expectations.

- Appendix 1 is an example of calculations of workload for faculty playing different roles within the department. If there are elements of the Teaching Plan that are unclear, contact the Head or Associate Head to get a better understanding.
- Appendix 2 is summary of how faculty have historically contributed in terms of supervisory activities and service.
- Appendix 3 is a comparison of the teaching loads within the department calculated in terms of Full Time Equivalents (FTE) and enrolments. This is informative in terms of how the patterns of student numbers and faculty have changed over the years.
- Discuss your teaching preferences with the Associate Head. Their goal is to construct a teaching plan that assigns faculty for all of the required courses, but there are often many ways to achieve this. It is common for faculty to express a preference and even come up with suggestions for novel approaches.
- The Annual/Biennial report serve to summarize your activities for a past assessment period. However, if you treat this as a living document that you build on regularly over the full 1-2 year period, you can see how your report develops and look for opportunities in areas in which you might otherwise be weaker.
- Ask colleagues to see their annual reports. These are private documents but most faculty are willing to share their reports, particularly with new faculty.

The original version of this document was approved by Biology faculty on May 21, 1997.

The revised version was prepared by the Workload Standard review committee (Peter Boag, Ken Ko, Paul Grogan, Chris Moyes) and approved by Biology faculty on April 20, 2017, and by the Dean of Arts and Science shortly thereafter.

A revision was requested (May 2018) by the FAS Dean and JCAA to address issues that arose in comparing documents prepared by different units within FAS. This version was approved by the department in Jan 2019.



## Appendix 1. Sample Teaching Plan Calculations

|                                |                      | 2016-17     | Explanation (does not appear in teaching plan) |
|--------------------------------|----------------------|-------------|--|
| <b>Faculty member</b>          |                      | <b>9.35</b> | Compared to an average load of $7.8+1.5=9.3$   |
|                                | Teaching relief      | 0.00        |  |
|                                | <b>BIOL102 (0.5)</b> | 4.55        | $(3.0^1+1.5^2+1.5^2+1.3^3)/2+0.9^4$            |
|                                | BIOL3XX              | 4.80        | $3.0^1+0.9^3+0.9^4$                            |
| <b>Faculty member</b>          |                      | <b>9.20</b> |  |
|                                | Teaching relief      | 4.65        | Half year sabbatical                           |
|                                | <b>BIOL201 (0.5)</b> | 3.05        | $(3.0^1+1.3^3)/2+0.9^4$                        |
|                                | BIOL8XX (0.5)        | 1.50        | No adjustments for a grad course               |
| <b>Faculty member</b>          |                      | <b>9.70</b> |  |
|                                | Teaching relief      | 0.00        | Compared to an average load of $7.8+1.5=9.3$   |
|                                | BIOL102 (0.5)        | 3.65        | $(3.0^1+1.5^2+1.5^2+1.3^3)/2$                  |
|                                | <b>BIOL201 (0.5)</b> | 3.05        | $(3.0^1+1.3^3)/2+0.9^4$                        |
|                                | BIOL8XX              | 3.00        | No adjustments for a grad course               |
| <b>Faculty member (buyout)</b> |                      | <b>9.70</b> | Compared to an average load of $7.8+1.5=9.3$   |
|                                | Teaching relief      | 3.00        | Negotiated teaching relief                     |
|                                | BIOL102 (0.5)        | 3.65        | $(3.0^1+1.5^2+1.5^2+1.3^3)/2$                  |
|                                | <b>BIOL201 (0.5)</b> | 3.05        | $(3.0^1+1.3^3)/2+0.9^4$                        |
| <b>Faculty member (UGSC)</b>   |                      | <b>8.75</b> |  |
|                                | Teaching relief      | 3.00        | Relief from a committee chair assignment       |
|                                | BIOL102 (0.5)        | 3.65        | $(3.0^1+1.5^2+1.5^2+1.3^3)/2$                  |
|                                | BIOL201 (0.5)        | 2.10        | $(3.0^1+1.2^3)/2$                              |
| <b>Faculty member (Head)</b>   |                      | <b>9.55</b> |  |
|                                | Teaching relief      | 6.00        | Release as a result of headship                |
|                                | BIOL341 (0.5)        | 2.05        | 8.05   |
|                                | <b>BIOL8XX (0.5)</b> | 1.50        | No adjustments for coordinating a grad course  |

1= base unit

2= repeated lectures

3= class size

4= coordinator (with any adjustments for PA)

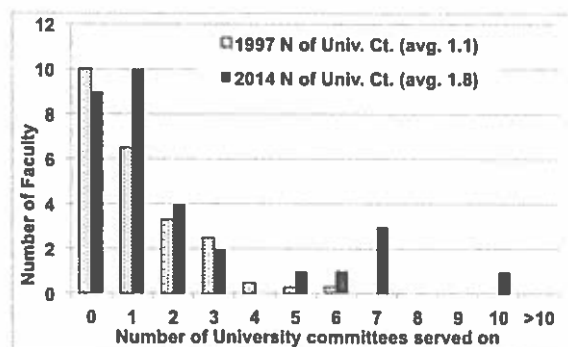
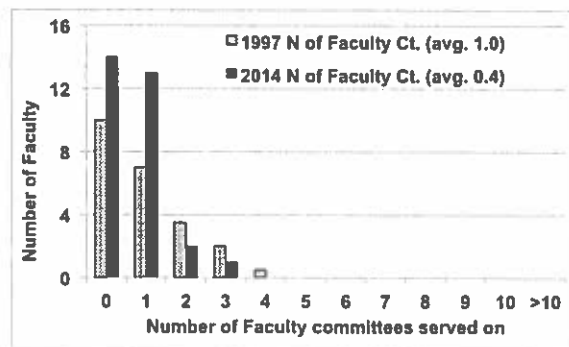
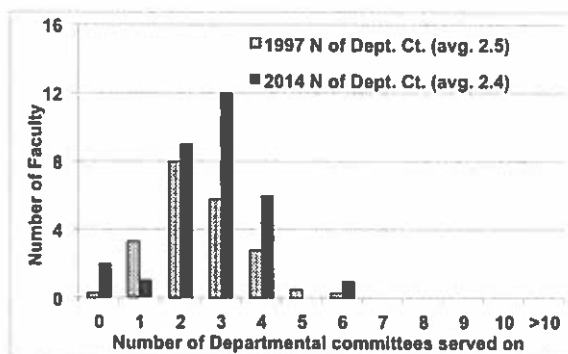
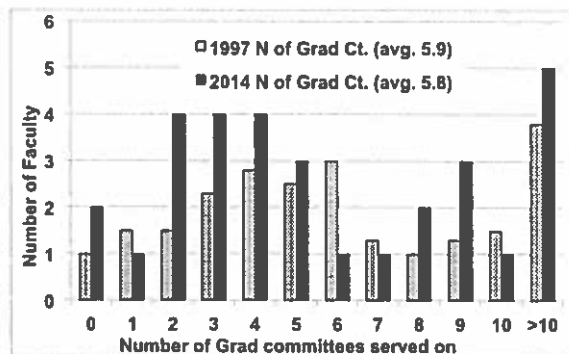
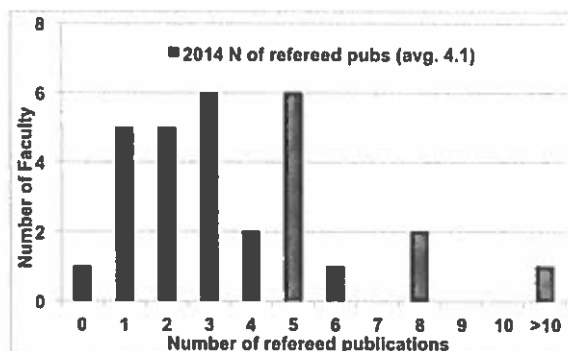
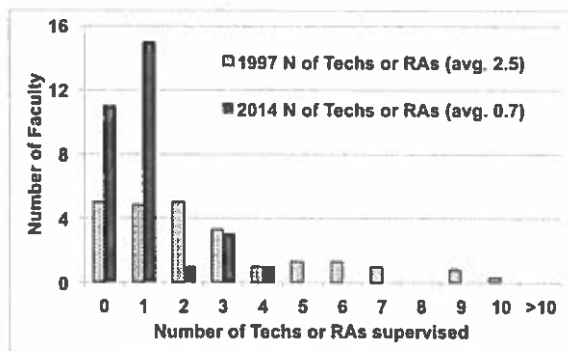
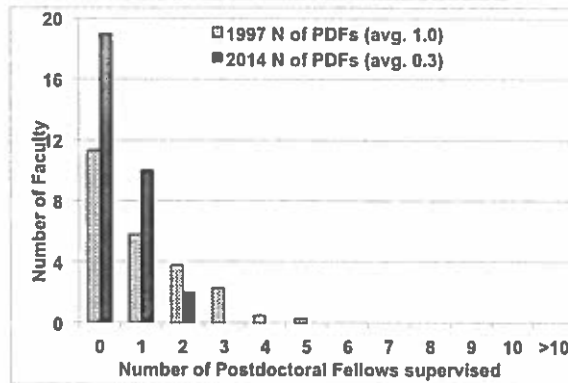
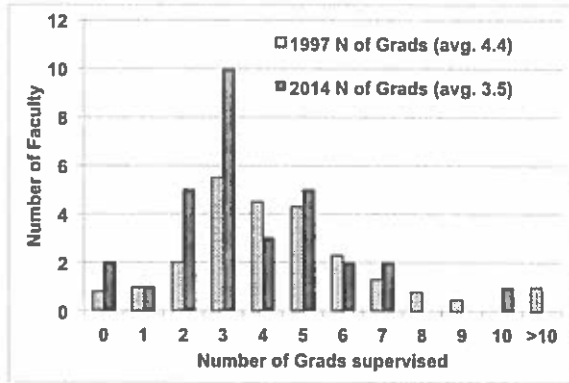
Notes: In practice, the Teaching Plan is delivered to faculty in the form of a workbook with 2 spreadsheets; one sheet shows assignments sorted by faculty and the other shows assignments sorted by course. Under the current CA, a preliminary version of the Teaching Plan is given to faculty each year by April 15, and a final plan by May 30. For planning purposes, periodically a 3<sup>rd</sup> version of this spreadsheet may be produced, sorted by faculty and showing total annual teaching loads. Total loads include data shown above, plus undergraduate supervision (1 independent study student gives a credit of 1.2 units (0.2 FCE), up to a maximum of 3 students (3.6 units or 0.6 FCE)) and graduate supervision (1 graduate student gives a credit of 1.2 units (0.2 FCE), up to a maximum of 3 students (3.6 units or 0.6 FCE)).

## Notes for Appendices 2 and 3

1. Appendix 2 '2014' data are individual faculty Annual Report (ARs) values averaged for 2011-2014. '1997' data are from the 1997 workload document and were averages of AR values from 1993-1996. The 1997 document did not include refereed publications.
2. The number of graduate students supervised in Appendix 2 is based on AR data. Appendix 3 shows the same averages plus those calculated by dividing the official grad count by the Full Time Equivalent (FTE) faculty count. Estimates of grads per faculty are higher using AR data because some students are co-supervised. Also, if 2 grads finish in spring and 2 new grads join the same lab in fall, an AR shows 4 grads that year while official Nov. enrolment shows 2 grads.
3. The number of RAs in both appendices includes paid research assistants and research associates, but not volunteers, work study students, summer students etc.
4. Appendix 2 cites faculty numbers as both Full Time Equivalents (FTE) and 'effective FTE' (eFTE). The latter are actual faculty available to teach in a given academic year, given sabbatical leaves, parental leaves, reduced periods of responsibility (RPRs) etc. These were estimated conservatively from old teaching plans and other sources, where it is not always clear if a listed leave applied to both terms of a given academic year etc.
5. Notes on the Teaching Indicators in Appendix 3 include:
  - '1997' course data are averages for 1996 and 1997 and '2014' data are for 2013 and 2014.
  - number of 'distinct courses' was estimated conservatively; e.g. Biol 102 was counted once even when offered as fall, summer and online versions in some years. Groups of related courses such as 307/08/17/27, 533/4/5/6, 537/38/39/40/40 etc. were each counted as one distinct course.
  - class sizes are total enrolment at a level divided by the number of 'distinct courses' at that level. The '% change' in class size is the change in overall averages for a level; it is not an 'average of individual course changes' and thus weights larger courses more. Changes in course numbers between 1997 and 2014 (e.g. 210 to 369, 243 to 343 etc.) make estimating changes in enrolment course by course difficult.
  - total enrolments are expressed as Full Course Equivalents (FCEs), equal to 6.0 units. Most Biology courses are now 3.0 unit half-courses. Exceptions are Biol 101 which became 102\* and 103\* in 2002/3, 537 (and 541) which are 12.0 units, and rare cases such as 308 worth 1.5 units. Appropriate weights were used to convert all enrolments to FCEs.
  - total enrolments in Biology are calculated in several ways. Internally, Biology now tracks enrolments as 'half-course equivalents', so double the numbers shown here. Arts & Science counts 'concentrators' or 'majors', but also tracks 'undergraduate FTE' for each unit. No one knows how this is calculated except A&S, but it roughly equals the total FCE for a unit divided by 5 (assuming a typical UG course load of 5 FCE). The official UG FTE teaching for Biology in 2013/14 was 715.4, fairly close to the 690 one gets dividing the total FCE of 3452 for 2013/14 by 5. The 'missing students' presumably are because here we did not count students in online or summer versions of courses etc. Since most such teaching has been externally funded by CDS or treated as overload, it seems appropriate to ignore it for workload calculations, at least for now.

## Appendix 2: Service and Supervisory Activities

Distributions of faculty contributions in areas used by original workload document



### Appendix 3: FTE analyses

| Workload indicator summaries                              |      |      |  |                      |
|---|------|------|--|----------------------|
| Item  | 1997 | 2014 |  | % change in 17 years |
| Faculty number (Full Time Equivalents)                    | 24   | 30.5 |  | 27%                  |
| Faculty number (eFTE, less sabbaticals etc.)              | 19.5 | 23.8 |  | 22%                  |
| Ratio of eFTE to FTE                                      | 81%  | 78%  |  | -4%                  |
| <b>Research indicators</b>                                |      |      |  |                      |
| MSc student numbers                                       | 53   | 44   |  | -17%                 |
| PhD student numbers                                       | 48   | 41   |  | -15%                 |
| Total Grad numbers  | 101  | 85   |  | -16%                 |
| Avg. N of grads per faculty (total grads/FTE)             | 4.2  | 2.8  |  | -34%                 |
| Avg. N of grads per faculty (from ARs)                    | 4.4  | 3.5  |  | -20%                 |
| Avg. N of PDFs per faculty (from ARs)                     | 1.0  | 0.3  |  | -70%                 |
| Avg. N of Techs/RAs per faculty (from ARs)                | 2.5  | 0.7  |  | -72%                 |
| Avg. N of refereed papers per faculty (from ARs)          | NA   | 4.1  |  | NA                   |
| <b>Service indicators</b>                                 |      |      |  |                      |
| Avg. N of supervisory cts. per faculty (from ARs)         | 5.9  | 5.8  |  | -2%                  |
| Avg. N of Dept. cts. per faculty (from ARs)               | 2.5  | 2.4  |  | -4%                  |
| Avg. N of Faculty/School cts. per faculty (from ARs)      | 1.0  | 0.4  |  | -60%                 |
| Avg. N of University cts. per faculty (from ARs)          | 1.1  | 1.8  |  | 64%                  |
| <b>Teaching indicators</b>                                |      |      |  |                      |
| <b>Number of distinct courses</b>                         |      |      |  |                      |
| 100 level   | 2    | 4    |  | 100%                 |
| 200 level   | 5    | 5    |  | 0%                   |
| 300 level   | 13   | 16   |  | 23%                  |
| 400 level   | 6    | 14   |  | 133%                 |
| 500 level   | 7    | 11   |  | 57%                  |
| Total number of distinct courses                          | 33   | 50   |  | 52%                  |
| Number of courses per faculty (FTE)                       | 1.4  | 1.6  |  | 19%                  |
| Number of courses per faculty (eFTE)                      | 1.7  | 2.1  |  | 24%                  |
| <b>Class sizes</b>  |      |      |  |                      |
| Average class size for 100 level                          | 405  | 558  |  | 38%                  |
| Average class size for 200 level                          | 254  | 335  |  | 32%                  |
| Average class size for 300 level                          | 82   | 136  |  | 66%                  |
| Average class size for 400 level                          | 22   | 29   |  | 31%                  |
| Average class size for 500 level                          | 16   | 19   |  | 22%                  |
| <b>Total enrolment by level (Full Course Equivalents)</b> |      |      |  |                      |
| Total enrolment for 100 level (FCE)                       | 1009 | 1115 |  | 11%                  |
| Total enrolment for 200 level (FCE)                       | 684  | 838  |  | 22%                  |
| Total enrolment for 300 level (FCE)                       | 535  | 1090 |  | 104%                 |
| Total enrolment for 400 level (FCE)                       | 67   | 203  |  | 205%                 |
| Total enrolment for 500 level (FCE)                       | 141  | 208  |  | 48%                  |
| Total enrolments (FCE)                                    | 2435 | 3452 |  | 42%                  |
| Total enrolments per faculty (FTE)                        | 101  | 113  |  | 12%                  |
| Total enrolments per faculty (eFTE)                       | 125  | 145  |  | 16%                  |



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Barbara Crow  
Dean  
Faculty of Arts and Science

May 15, 2019

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Date