

Wyant College of Optical Sciences T/TE Faculty Workload Guidelines

1. Background

The mission of the University of Arizona Wyant College of Optical Sciences is to provide the state of Arizona and the nation with an internationally pre-eminent program in education, research and outreach in all aspects of the science and application of light. The James C. Wyant College of Optical Sciences Workload Guidelines are intended to capture the level of contributions expected of individual members of the faculty towards the success of the mission of the college.

Faculty workload is captured in three areas of performance – Research, Teaching, and Service. The college strongly values the ability to flexibly measure faculty performance balanced across these three areas, and hence the detailed workload in each respective area may vary according to each faculty member's abilities and current interests. This balance may also change over time to meet the college needs in addressing its mission.

2. Workload assignment process:

- a) Workload is estimated cooperatively in discussion with the dean during annual performance review feedback. This typically happens in late spring. Teaching load may be adjusted later in the year as described in the teaching section below.
- b) Faculty members have the opportunity to comment or document any disagreement on their signed annual feedback form where the workload for the coming year is captured. Disagreements are exceedingly rare, and when they do occur, they have been readily resolved in the discussion noted above.

3. Workload distribution

- a) The Wyant College of Optical Sciences is the most research-intensive unit at the University of Arizona, often resulting in a disproportionately larger research workload. A typical workload distribution would be 35% teaching, 55% research, and 10% service.
- b) Some faculty have developed exceptionally large and demanding research portfolios which may include executing several \$M/year of research contracts and mentoring more than 15 PhD students. This situation usually requires a reduced teaching load and a distribution such as 15% teaching, 75% research, 10% service. Conversely, some faculty with lower extramurally funded research may have a correspondingly higher teaching load and a distribution such as 75% teaching, 15% research and 10% service.
- c) Teaching often includes a core or required undergraduate or graduate course one semester, and an advanced graduate or specialty course another semester. Faculty typically end up teaching approximately four distinct courses during the period in rank.

4. Guidelines

- a) **Research Workload Guidelines:** Leadership in research has been a critical attribute of the Wyant College of Optical Sciences dating back to its origins as the Optical Sciences Center in the early 1960s. In general, faculty members are expected to maintain their status as a distinctive researcher in the eyes of the faculty member's peers, both external and internal to the University. Measures to illustrate a distinctive record of research and research productivity include:
 - A sustained record of publications in journals and conference proceedings appropriate to the

Wyant College of Optical Sciences T/TE Faculty Workload Guidelines

faculty member's field. The significance of publications, not merely the number, is also noted as measured both by citation metrics such as the h-index and by the quality, review rigor, and visibility of publication venues.

- Demonstrating a sustained ability to initiate and complete innovative research projects. Such projects are often individual faculty projects, but substantial contributions or leadership in larger collaborative projects with other researchers are also highly valued.
- Demonstrating a sustained ability to successfully approach and secure external funding agencies for the support necessary to develop and maintain an active research program. External funding sources include federal and state agencies, private sector partners and foundations.
- Demonstrating a sustained ability to supervise a group with several graduate students concurrently through degree completion. MS student thesis supervision is a valued contribution to talent production needed to fulfill the college mission noted above, while PhD student supervision is the most highly valued contribution and is expected of faculty. This supervision is dependent on the funding noted above as the principal source of support for PhD student tuition and stipends, in addition to funding needed for postdocs and research scientists who are also valued members of the college research enterprise.
- It is recognized that funding levels available for support for PhD students vary in time and often with the mix of theoretical work vs. experimental work in the faculty member's research portfolio, with experimental programs generally supporting more students. The expectations articulated here are multi-year averages.
- Research experiences for undergraduates are encouraged as a valuable contribution to the college mission.

While these research attributes individually have volumes associated with them, their levels vary by individual and are taken in their entirety in assessing research success in the Wyant College of Optical Sciences.

- b) **Teaching Workload Guidelines:** Faculty members in the Wyant College of Optical Sciences are nominally expected to teach the equivalent of one 3-credit course or a lab course per semester in an area of optics appropriate to their domain of research. This includes successful independent planning and teaching, including keeping course material contemporary with the state-of-the-art in the field. This teaching load may vary for faculty with significant deviations from average in research activity. As noted above, faculty members whose research volume becomes exceptionally high may have their teaching load reduced, noting that graduate student mentoring with large groups is itself a substantial teaching contribution. Conversely, faculty whose research portfolio falls substantially below the expected norms will typically be asked to teach more than the standard one course per semester. These allowances are not determined prescriptively, such as “buying out of teaching” as is done in some institutions but is instead arrived at in a case-by-case basis in discussion with the dean and associate deans for academic affairs.

With regard to the size of class enrollment, in most cases the Wyant College of Optical Sciences follows the minimum class size as per <https://policy.arizona.edu/student-life-and-education/student-enrollment>, Item 7.03.06. There can be special circumstances when we

Wyant College of Optical Sciences T/TE Faculty Workload Guidelines

potentially deviate from the guidelines:

- New courses: We provide up to three years for a new course to reach the enrollment numbers in the guidelines. During this time, we will work with the instructor(s) to ensure that it grows to the guideline numbers. In cases where enrollment remains low, steps may include changing the frequency of the course offering (e.g., every other year), updating the course syllabus, or potentially stop offering the course.
- Required courses: There have been some required courses that drop below the guidelines. This has resulted from the college's attractive Accelerated Master's Program where advanced Optical Sciences undergraduates take a graduate version of a required undergraduate course. The required undergraduate course(s) is/are still offered, and the low number enrollment is a one-year anomaly.
- Recruiting courses such as OPTI 100H – What is Light? and OPTI x89 – Optics Outreach. In these courses, we are educating current students and potential future generations of students about the field of optics.

In some instances, in conjunction with the course instructor and the Associate Dean for Academic Affairs, a course may be cancelled due to low enrollment.

- The decision to cancel a course is made at the earliest date to provide a viable teaching opportunity for the instructor(s).
 - This process is often integrated into management of retirements, sabbaticals, leaves, and other events that will lead to well-attended courses needing a new or temporary instructor. Thus, a course that has the potential for low enrollment or a decreasing number of students over the previous years, will be canceled. The instructor for the canceled course will be reassigned to the course that has an opening.
 - Rarely, a course must be canceled due to low enrollment right before a semester starts. When this occurs, the instructor for the canceled course can take over a course for a professor who is teaching more than one course in a semester, a course not being currently offered is added to the schedule, and, in very limited circumstances, new course development is offered through independent study or OPTI x96 – Special Topics.
- c) **Service Workload Guidelines:** Faculty members are expected to serve on one or more college or university committees per semester. The workload of the different committees varies widely, and thus cases where faculty are asked to serve on more than one committee simultaneously are limited to circumstances where at least one of the committees is a light workload. Committee assignments are for one, two and sometimes three-year terms, and service is rotated to balance the workload across faculty members. Faculty members are also strongly encouraged to be engaged in the outside professional community in conference management and journal editorial and publication review activities. Other activities in community outreach are also valued and considered in overall contributions to service.