

Administrative Activities Review

I. BASIC FACTS AND DESCRIPTION OF THE UNIT.

a. Mission and goals

The Biology Office in the Department of Biology has two primary missions: to service faculty/staff and students (both undergraduate and graduate). We offer bachelor's degrees in Biology and Biomedical Science, serving >700 undergraduates. We also have two graduate programs: a Master of Science degree (now down to ~3 MS students for Fall, 2018) and a Doctoral degree in Integrated Biosciences (serving ~40 PhD students).

The mission of our Administrative Unit in the Biology Department is to facilitate the educational and research programs for our nearly 800 students, staff and faculty. To do so, we provide information, process paperwork, organize the teaching labs, order appropriate lab supplies (e.g., chemicals), offer field experiences and provide guidance to our constituents.

Our near- and long-term goals are the same: to provide the best service to our faculty, staff and students that our funding and personnel can afford.

b. Services

1. Undergraduate Students

i. Critical partners

The Biology office relies primarily on the Arts and Sciences Dean's office for help with administering to the undergraduate students. We rely on the A&S advisors (especially Ashley Rini for our growing Biomedical Science degree), the Associate Deans and the A&S Administrative Assistant for many issues related to the undergraduate students.

Our Chemical Storekeeper interacts with Purchasing and Physical Facilities primarily.

Our Field Station Manager interacts with Physical Facilities a good deal.

ii. Customers or end-users

Biology has one of the largest undergraduate populations on campus, with an average of 838 undergraduate majors (Biology + Natural Science + Biomedical Science) per year over the last three years.

iii. Key performance analysis

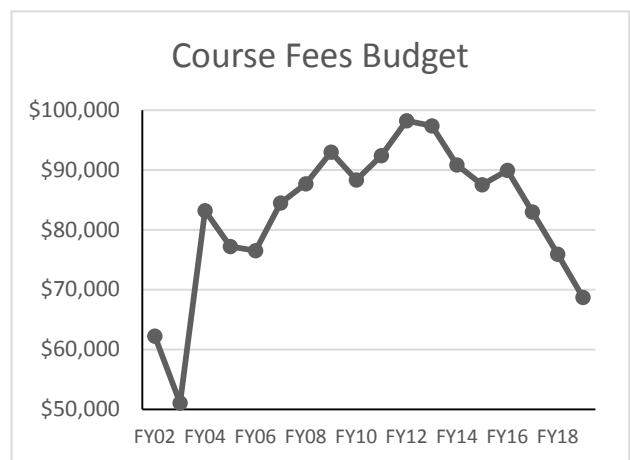
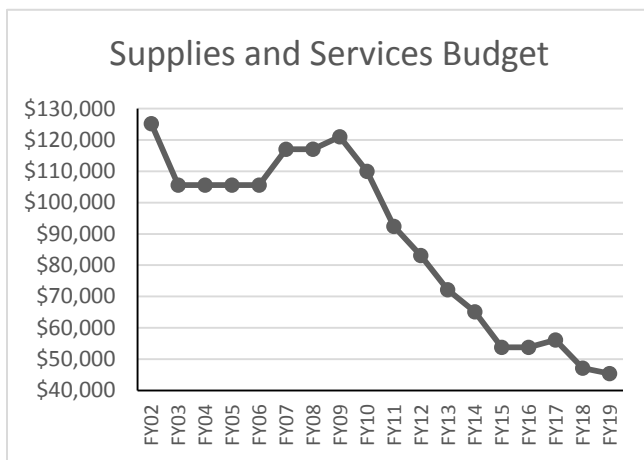
There are no clear metrics for our administrative unit. We process large volumes of electronic and actual paperwork, field many email and phone questions, order many supplies for labs, work with hundreds of K-12 students at the Martin Field Station every year and handle problems from walk-in students to the office. We are not keeping specific metrics of these events nor are we aware of other units (on or off campus) that do so. Thus, we are not able to compare such metrics to other units if we did collect them.

Primarily we strive to get our paperwork, etc. submitted on time, to make sure our teaching labs are fully functioning for our students, to keep the Field Station functional for our users and to minimize any complaints the students may have with our performance.

iv. Brief assessment

Our unit is working effectively. We have hit all of our deadlines, handle student questions and needs in a timely fashion and our labs are running smoothly.

Our challenge is to continue to provide good service with an ever dwindling budget. Five years ago, our supplies and services budget was \$82,209 (which includes carryover funds from previous years). In FY19 that same budget is \$45,412, a 45% decline over 5 years. Overall, our Supplies and Services budget allocation (not including carryovers) in Biology has steadily dropped since FY09 dropping 63% in those 10 years (see below).



Note: FY19 Course Fees budget is projected using already allotted fees + those projected for Spring, 2019 using Spring 2018 as a predictor and assuming a 13% decrease in enrollment (from Fall, 2018 enrollment declines).

Our labs are funding by our Class Fees account, which also has been continually dropping from FY12.

The combination of reductions in the Supplies and Services as well as the Course Fees budgets has put a financial strain on the operation of the Administrative Unit in Biology. This strain was exacerbated by the sweeping of the carryover accounts in FY16 that removed any financial buffer from year-to-year spending in both of these accounts.

We continue to be as frugal as possible, but these continual financial reductions strain our ability to provide adequate service to our students, staff and faculty.

2. Graduate Students

i. Critical partners

The Biology office relies primarily on the Arts and Sciences Dean’s office for help with administering to the graduate students. We rely the Associate Deans and the A&S Administrative Assistant for many issues related to graduate student contracts, etc. Additionally, we rely heavily on the Graduate School for issues related to graduate students, both financial and for processing the paperwork needed to graduate these students.

ii. Customers or end-users

The Biology staff serve an average of 66 graduate students (17 MS & 49 PhD) per year. There was an increase in both MS and PhD students (36% and 9%, respectively) from 2014 to 2016. However, with budget cuts to the MS program, our MS students halved in FY18 and will be down to only 3 students in FY19. The PhD program has been reduced slightly, but is still has around 40 doctoral students.

iii. Key performance analysis

As noted above, there are no clear metrics for administering to our graduate students, outside of the sheer numbers of students we attend to from year to year.

iv. Brief assessment

Because of the lack of funding for the Master's program, and the subsequent plunge in MS enrollment, we expect to be helping fewer graduate students overall. This will allow us to concentrate our efforts on our Doctoral graduate students.

3. Faculty and Staff

i. Critical partners

The Biology office relies primarily on the Arts and Sciences Dean's office for help with administering to the faculty and staff. We rely on the Dean, the Associate Deans and the A&S Administrative Assistant for many issues related to both faculty and staff.

ii. Customers or end-users

We have 16 full time faculty (13 tenure track, 1 NTT Instructor and 2 Visiting Assistant Professors). In the office, we have one Secretary, one Administrative Assistant and the Chair. We also have four Laboratory Coordinators for our four biggest labs, one Field Station Manager and one Chemical Storekeeper in charge of our stockroom.

iii. Key performance analysis

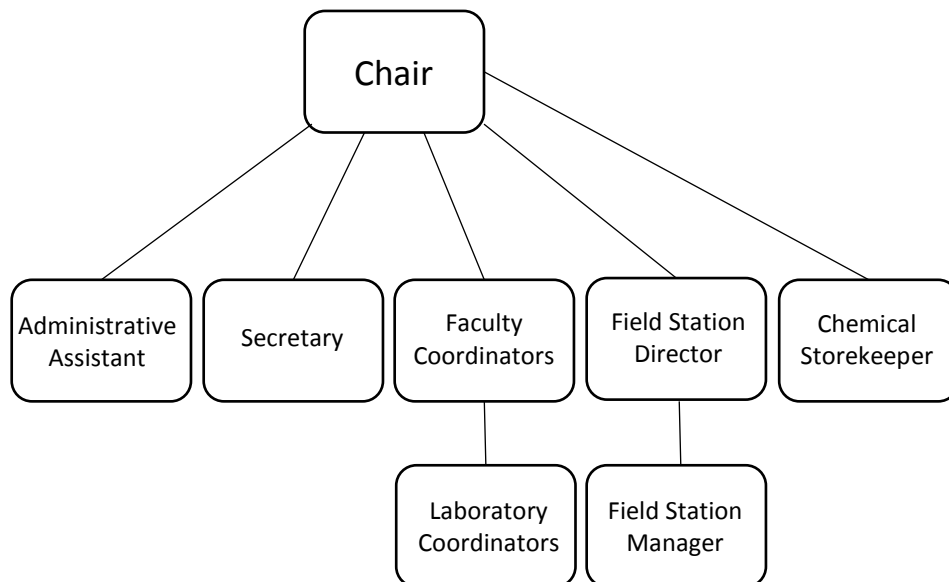
Once again, there are no clear metrics for our administration to faculty and staff. We respond to any and all complaints and process our various paperwork in a timely fashion. No clear comparative metrics exist for this level of function, to the best of our knowledge.

iv. Brief assessment

We believe we do a good job for our faculty and staff given our small staff and limited resources. However, as noted above, our dwindling Supplies and Services budget strains our ability to service our faculty and staff.

c. Resources

1. Personnel



Title	Description of Functions	Number of People
Chair	Oversee office and building staff; develop course schedule; interface with Dean's office; oversee building issues; oversee Dept budgets; mitigate student problems; interface with faculty and assign teaching loads	1
Administrative Assistant	Develop contracts; monitor Dept budgets; degree clearance; TAARs; hiring process manager; interface with students for class needs; general PeopleSoft work	1
Secretary	Interact with public (walk-ins, phone calls, emails); provide office support to faculty and students; maintain online presence (web site, Facebook, Twitter); organize paperwork and order office supplies	1
Faculty Coordinators	Faculty overseeing our four largest laboratories: Human Anatomy and Physiology, Natural Science-Biology, Principles of Biology, and Microbiology; oversee Laboratory Coordinators running these labs	4*
Laboratory Coordinators	Organize and run our four largest labs (noted above); anticipate upcoming lab needs and order needed supplies; develop materials for labs (e.g., pouring gel plates in microbiology, etc.); work with faculty to develop new labs; overseeing teaching assistants, including weekly TA meetings for upcoming labs; train TA's	4
Field Station Director	Oversees the Martin Field Station on the Bath Nature Preserve (BNP), including monitoring the UA research and teaching activities conducted at the BNP	1*

Field Station Manager	Organizes the day-to-day teaching and research activities at the Field Station; organizes outreach activities to the community; interfaces with Bath Township personnel; manages physical facilities at field station (i.e., building and grounds)	1
Chemical Storekeeper	Monitoring stockroom supplies and ordering new supplies as needed; interfacing with laboratory coordinators to order supplies for larger teaching labs; interfacing with faculty to order supplies for smaller teaching and research labs; oversees maintenance of larger Bio Dept equipment (e.g., autoclaves)	1

**These faculty are not part of the administrative unit but are in charge of the noted staff.*

2. Financials

Biology's budget for administrative needs is embedded in the Supplies and Services (SS) budget for the entire department, and in the Course Fees budget, both of which are noted below.

Fiscal Year	Supplies and Services Budget	Expenses	Budget - Expense
FY14	\$65,144	\$47,181	\$17,963
FY15	\$53,794	\$78,429	-\$24,635
FY16	\$53,794	\$57,975	-\$4,181
FY17	\$56,164	\$47,377	\$8,787
FY18	\$47,164	\$50,444	-\$3,280
Ave	\$55,212	\$56,281	-\$1,069

As in I.b.1.iv noted above, the Supplies and Services budget has been declining for a decade, with a 45% drop in yearly allocations in just the last 5 years. Previous to FY16, Biology was allowed to carry over unspent SS funding to cushion the yearly variation in SS expenses. Starting in FY16, this carryover was eliminated and thus no cushion exists for greater-than-average expense years (e.g., FY15).

As you can see, the Biology SS expenditures over the past 5 years range from a low of \$47,181 to a high of \$78,429, a range of over \$31,000. The average expenditures are slightly over \$56K/yr. The variation reflects periodic maintenance contract expenses, replacement of aging teaching supplies, and replacement and repair of items within the Biology Department more generally.

The most important takeaway is that the FY19 allocated SS budget of \$45,412 is \$1,769 lower than the lowest expenditure year in the last five years and is ~\$11,000 lower than the average expenditures in Biology over that same time frame. Given that Biology's Supplies and Services budget has dropped over 60% in the last decade (in real, non-inflation-adjusted dollars), there is no more "fat" to cut. Instead, continued budget reductions are damaging our ability to function, both as an administrative unit and as a department overall.

Similar to the Supplies and Services budget, the Class Fees (CF) Budget has been in decline since FY12 (see I.b.1.iv above). The CF budget has not dropped as dramatically as the SS budget, dropping 16% over the last 5 years (compared to 45% in the SS budget).

Fiscal Year	Class Fees Budget	Expenses	Budget - Expenses
FY14	\$90,849	\$91,426	-\$577
FY15	\$87,540	\$101,489	-\$13,949
FY16	\$89,964	\$95,423	-\$5,459
FY17	\$82,993	\$77,284	\$5,709
FY18	\$75,921	\$95,662	-\$19,741
Ave	\$85,453	\$92,257	-\$6,804

The CF budget has run a deficit every year but one in the last 5 years. Before FY16, such deficit spending was masked by carryover funds, but since then, covering deficit spending with carryover is not possible.

One important reason the CF budget has been in deficit in the past several years is that funding for staff was placed into this account in FY14 to cover overall budget cuts to our main operating account in that fiscal year. In the past 5 years these staffing costs (salaries + fringe) have averaged \$15,604/yr. This explains the majority of the overspending in this account, except for FY18. In this last fiscal year, a good deal of CF funding (~\$10K) was used to set up a new Anatomy lab, including the use of a cadaver and buying new anatomy models required for this new lab.

As with the SS budget, we anticipate another reduction in the CF budget (to ~\$69,000) which will be ~\$23,000 lower than the average CF spend over the past 5 years.

3. Equipment and Technology

The primary equipment critical for our administrative office are our computers, one color printer, one poster printer and the copier.

The primary equipment for our laboratory coordinators are their computers and for the Microbiology Laboratory Coordinator, our autoclaves.

The primary equipment for our Field Station Manager is her computer, her printer, the Field Station server, GPS, and the Biology Department vehicles.

The primary equipment for our Chemical Storekeeper is his computer and printer.

4. Space

Our administrative office is in a 6 room suite (1,055 sq ft total). The Chair, Administrative Assistant and Secretary occupy 3 of those 6 rooms (653 total sq ft), with the remainder allotted to Biomimicry (1 room; 117 sq ft), the copy/mail room (123 sq ft), and a small conference room (162 sq ft).

Our Laboratory Coordinators occupy the following space. For Human Anatomy and Physiology, the Lab Coordinator has a 133 sq ft office and two teaching laboratories (2,814 sq ft total). The Natural Science Lab Coordinator has a 242 sq ft office and a 2,473 sq ft teaching lab area. The Principles of Biology Lab Coordinator has a 133 sq ft office and a 1,541 sq ft teaching lab. The Microbiology Lab Coordinator has a 42 sq ft office and two teaching labs totally 1,905 sq ft.

The Martin Field Station is 5,439 sq ft. total, and the Field Station Manager has an office occupying 314 sq ft of that total.

Our Chemical Storekeeper has a 140 sq ft office and manages two stockroom areas totaling 548 sq ft.

II. FUTURE PLANS

a. Potential Changes

Biology has a huge potential for increasing enrollment. In 2017 UA admitted 790 students interested in Biology or Biomedical Science. Only 25% (196) of those students actually enrolled in UA. In 2018 UA had an even higher number of admits (1,199) to Biology and we expect a similar percentage (20-25%) will actually matriculate. Thus, we have an excellent opportunity to get many more Biology students to UA if we can offer these admitted students a better experience relative to other regional biology programs.

One way to better attract students from this large pool of acceptable applicants is to offer better experiential learning opportunities and to better advertise ourselves to this large pool of applicants. We would like to add to our administrative unit by hiring a full-time recruitment and undergraduate research advisor and coordinator. Such a person could oversee recruitment efforts for our new Tiered Mentoring program, bringing faculty and students together to build research teams for experiential learning. A staff member in such a position could additionally place students into clinical opportunities in the region for shadowing and internships. This person would promote our programs, reach out to our many hundreds of accepted applicants each year, and design our advertising materials (online and physical) to increase our yield of undergraduate applicants.

The combination of offering experiential learning opportunities with more effective advertising would quickly pay for our new administrative hire and could increase Biology's undergraduate population substantially over the next 3-5 years.

b. Trends

Jobs in Biology, especially in healthcare, are among the fastest growing sector of the job market over the next 10 years. Student response to these trends is reflected in our shift in Biology majors from general biology to our new Biomedical Science Bachelor's degree. If we are successful at capturing more of the students interested in Biology and Biomedical Science, thereby significantly increasing our undergraduate population from its current 700-800 range, we may require additional administrative help. In the past, the Biology office had its current staff (Chair, Administrative Assistant, and Secretary) as well as an Assistant Chair and 1-2 paid undergraduate students. If we can successfully grow our program, recovering some or all of these administrative personnel would increase our effectiveness to the students, staff and faculty in the Biology Department.