

Draft policy and guidelines for allocation of department graduate teaching assistantships - School of Natural Resources

SNR Graduate Ad Hoc Committee—Spring 2019
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Background

Graduate teaching assistants (GTAs) provide critical support to classes and graduate students with valuable professional experience in teaching methods. Partial graduate teaching assistantships totaling approximately \$160,000 per year are currently distributed among 40 spring and fall classes in the School of Natural Resources (SNR; see Table 2 appendix). This total may increase if SNR proactively develops a more systematic process for allocation of these awards. GTAs generally provide support to high enrollment undergraduate classes, though a lack of a systematic policy currently limits the full benefit of this resource.

Awarding and distributing GTAs to courses and students has used a cumbersome application process making it difficult for faculty and students to plan and participate. Variable timing and stipend amounts awarded may contribute to uncertainty to those who rely on these for financial support. Some students supported have become overcommitted because there is no process in place to systemically award and monitor GTAs. The use of GTAs as a supplement to existing grant-funded assistantships (GRAs) has contributed to situations where students are unable to meet their course responsibilities as well as their own graduate program needs. Finally, and most importantly, the value of GTAs as a tool for recruiting and retaining high quality graduate students has likely declined due to a lack of standardized policies and guidelines intended to prioritize and distribute these funds.

Objectives of these guidelines

To make the best use of limited funds for GTAs, the SNR Graduate Ad Hoc committee proposes the following policies and guidelines for prioritizing and allocating graduate teaching assistantships each semester. The SNR Director is jointly responsible with the SNR Graduate Committee for allocating these funds although faculty and staff are jointly responsible for implementing these policies.

The objectives of these guidelines are to:

- maximize the use of funds for efficient allocation/assignment of teaching resources
- improve student recruitment and retention
- provide greater financial security and reliability for students on assistantship support

The guidelines and policies will minimize logistical requirements to match students with course needs and ensure appropriate workload expectations.

Considerations based on current needs and previous issues

A survey of SNR faculty in January 2019 provides a snapshot of current GTA needs (Table 3, appendix). The survey includes responses from 17 faculty teaching approximately 25 undergraduate courses offered both in the fall and spring semester. The estimated weekly GTA support was converted to a semester total assuming a 20-week semester. Based on the survey responses on average, approximately 180 hours of GTA support per

semester is needed for these courses, ranging from a minimum of 45 hours and maximum of 360 hours (Table 3, appendix).

Using the survey responses and acknowledging the current logistically-challenging process, the committee has considered that the following issues should be considered in our policy:

- GTA duties include actual in-class teaching, preparing and teaching labs, grading homework, providing office hour support, lecturing in the absence of instructors, leading field trips, support for online activities.
- GTAs spend an average number of 180 hours per semester on these critical teaching duties.
- Increases in the number of positions and courses supported has created an every-semester logistical challenge in finding and assigning students.
- SNR administrative staff have assumed the task of allocating assistantships. A faculty-staff driven process for assignment of assistantships is more consistent, transparent, and sustainable.
- A small number of students now rely on combining multiple assistantship positions to provide their sole financial support. It can be difficult for instructors to work effectively with these students due to scheduling constraints. There are concerns that expectations may lead to a greater workload than 19.6 hours / week (0.49 FTE; see attachment IANR GTA distribution model).
- The semester-by-semester assistantship system provides little or no financial security for students solely reliant on teaching assistantship funds.

Proposed Prioritization Process

The SNR Graduate Ad Hoc committee recommends consolidating GTAs and will follow the IANR guidelines to provide instructor support for each SNR major gateway course or broad coverage course up to the amount available each year. Each assistantship awarded will require a departmental commitment to the student for at least two semesters, renewed each year for a maximum of 2 years. Formal GTAs will only be provided to classes who need actual teaching support to instructors of high enrollment 100, 200, 300, and 400-level courses with labs and lectures. The numeric categorization below provides a general order of prioritization for assigning GTAs. Top priority (e.g., courses falling in category 1) will be given to courses that are mission critical to SNR undergraduate majors. Recruitment of undergraduates through gateway courses will be the highest priority and key to establishment and connection with students in each major. Required core courses within SNR majors will receive highest priority.

GTA assignments aligned with IANR funding guidelines must meet at least one of the following requirements:

1. Lecture only courses with typical enrollment > 20 students
2. Lecture and lab courses with typical enrollment > 15 students
3. Lab only courses with typical enrollment > 20 students
4. Lecture and lab courses with >2 lab sections per semester may be eligible for additional assistance
5. One or multiple TAs for courses below these thresholds will not be considered.

Proposed Course Prioritization Criteria

The numeric categorization below provides a general order of prioritization for assigning assistantship funds. Top priority (e.g., courses falling in category 1) will be given to courses that are mission critical to each undergraduate major.

1. Gateway courses (key to establishment and connection with students in each major)
2. Required core courses for a given major
 - a. Required for 2 or more majors
 - b. Required for 1 major, Recommended for 2 or more majors
3. Other undergraduate courses
4. Graduate courses

Fully funded assistantships for each major gateway course and other broad coverage courses; currently including NRES 211, 220/222, 281, 301, 311, 312, 323, 433, 453. Assistantships would require an additional semester of work if gateway course taught one semester per year.

Hourly Teaching Support

Because many of the funds now used for GTAs are for irregular duties, the committee recommends allocating a portion of each year’s assistantship support for hourly stipends and require each instructor to request additional teaching support for exams, field trips, etc. through a separate process. Short term or nonteaching responsibilities (e.g., field trips, group activities, etc.) will be separated from regular teaching assignments. Hourly teaching support will be requested and scheduled by the instructor each semester in advance and assigned as needed.

SNR Graduate Teaching Assistantship Award

Currently each eligible student receives a single semester teaching assignment at a cost of \$4,167 per course (19.6 / hours per week). This system results in 1) a large number of partially funded assistantships and 2) situations where a student can be responsible for more courses than they have time to manage. The committee recommends that each assistantship award be aligned with the minimum amounts required for a graduate assistantship and that the awards be made for 2 semesters (1 year) per student.

The minimum amounts for a full graduate assistantship award are listed in Table 1. Each fulltime TA award would require assignment to two 2 sections of a gateway/required course per semester (*4 courses per year – cost equivalent to \$16,668 as currently allocated*) as outlined in the previous section. Part time, one time or hourly teaching needs would be handled separately. Note that this may reduce the number of TAs awarded each year, but provides greater stability to those receiving awards.

Supplemental Material

*Policy for minimum research and teaching graduate research assistantship
(email from Christine Steggs dated 5/24/2018)*

“At the October 2017 SNR faculty meeting, you voted to increase the minimum assistantship stipends effective August 2018, August 2019, and August 2020. Please refer to the below pay schedule and make note of the following:

Existing graduate students continuing beyond August 1, 2018 and not graduating in August, will be paid the new rate based on their year in the program (e.g., if they will be in Year 2 of an MS program, they will be paid \$20,500 annually, \$1,708.33/month).

If a student is paid from grant funds, your reconciler will be asked to verify grants & other funds you have available to fund the student.

NOTE: for a 12-month assistantship, the cost object used to pay the summer salary is not billed for tuition remission, so summer is a good time to use funds that cannot support tuition remission or are limited, e.g., F&A return, online revenue, Mac-Stennis, revolving."

SNR Graduate Student Stipends

Table 1. Policy for minimum graduate assistantship awards effective August 2018.

Year in Program	Rates Effective August 1, 2018				Rates Effective August 1, 2019				Rates Effective August 1, 2020			
	MS	Monthly	PhD	Monthly	MS	Monthly	PhD	Monthly	MS	Monthly	PhD	Monthly
Year 1	\$20,000	\$1,666.67	\$22,000	\$1,833.33	\$22,000	\$1,833.33	\$24,000	\$2,000.00	\$24,000	\$2,000.00	\$26,000	\$2,166.67
Year 2	\$20,500	\$1,708.33	\$22,500	\$1,875.00	\$22,500	\$1,875.00	\$24,500	\$2,041.67	\$24,500	\$2,041.67	\$26,500	\$2,208.33
Year 3			\$23,000	\$1,916.67			\$25,000	\$2,083.33			\$27,000	\$2,250.00

Table 2. Summary of Current Graduate Teaching Assistantship assignments by course (2017-18)

CourseNumber	Sect	Type	Course Title	CR HR	Enr Max	Instructor(s)	TA	Cost	TA assignment
NRES 104	001	Lec	Climate in Crisis	3	50	Shulski,Martha	1	3,000	prepare & present lectures, grade assignments; facilitate in-class group activities & discussions
NRES 208	001	Lec	Applied Climate Sciences	3	40	Woudenberg, Donna (temp lecturer teaching for Betty Walter-Shea)	1	1,800	teach; grade assignments; lead in-class discussions & group activities
NRES 211	001	Lec	Introduction to Conservation Biology	3	45	Ferraro, Dennis	1	4,500	attend class; grade assignments; assist with hands-on activities; give 1-2 lectures; assist with exam development; hold study sessions before each exam
NRES 220	001	Lec	Principles of Ecology (fall)	3	140	Tyre, Drew (fall)	2	10,750	present lectures, grade exams & quizzes
NRES 222	001	Lab	Ecology Laboratory (fall)	1	20	Tyre, Drew (fall)	1	4,167	prepare & present lessons/assignments; grade assignments; drive van on field trips
NRES 222	002	Lab	Ecology Laboratory (fall)	1	20	Tyre, Drew (fall)	1	4,167	prepare & present lessons/assignments; grade assignments; drive van on field trips

CourseNumber	Sect	Type	Course Title	CR HR	Enr Max	Instructor(s)	TA	Cost	TA assignment
NRES 222	003	Lab	Ecology Laboratory (fall)	1	20	Tyre, Drew (fall)	1	4,167	prepare & present lessons/assignments; grade assignments; drive van on field trips
NRES 220	001	Lec	Principles of Ecology (spring)	3	140	Higley, Leon (spring)	2	11,500	grade exams and weekly quizzes; assist with course management
NRES 220	700	Lec	Principles of Ecology	3	100	TBD		online funds	monitor discussion boards, post questions/answers, grade exams/quizzes
NRES 222	001	Lab	Ecology Laboratory (spring)	1	20	Higley, Leon (spring)	1	4,167	teach lab; attend lab prep meetings
NRES 222	002	Lab	Ecology Laboratory (spring)	1	20	Higley, Leon (spring)	1	4,167	teach lab; attend lab prep meetings
NRES 222	003	Lab	Ecology Laboratory (spring)	1	20	Higley, Leon (spring)	1	4,167	teach lab; attend lab prep meetings
NRES 233	001	Lab	Wildlife Field Techniques Lab	3	65	Powell, Larkin	1	4,167	Grade papers, facilitate discussions; assist with field trip coordination and activities
NRES 281	002	Lec	Introduction to Water Science	3	100	Thomas, Steve; Franz, Trenton; Pegg, Mark	1	6,265	Grade assignments, papers, exams; give a lecture or two during the semester
NRES 301	001	Lec	Environmental Communication Skills	3	33	Pennisi, Lisa	1	3,000	prepare & present lessons; help students improve their writing; grade papers
NRES 311	150	Lec	Wildlife Ecology and Management	3	120	Powell, Larkin Brown, Mary	1	2,000	assist with grading
NRES 312	150	Lec	Introduction to Geospatial Information Sciences (fall)	3	45	Ou, Gengxin (Michael)			
NRES 312	151	Lab	Introduction to Geospatial Information Sciences (fall)	0	15	Howell, Jonathan (TA)	1	4,917	teach labs; help students; attend lab prep meetings; grade assignments
NRES 312	152	Lab	Introduction to Geospatial Information Sciences (fall)	0	15	Howell, Jonathan (TA)	1	4,917	teach labs; help students; attend lab prep meetings; grade assignments
NRES 312	153	Lab	Introduction to Geospatial Information Sciences (fall)	0	15		1	4,167	teach labs; help students; attend lab prep meetings; grade assignments
NRES 312	154	Lab	Introduction to Geospatial Information Sciences (fall)	0	15	TA			teach labs; help students; attend lab prep meetings; grade assignments
NRES 312	150	Lec	Introduction to Geospatial Information Sciences (spring)	3	45	Ou, Gengxin (Michael)			
NRES 312	151	Lab	Introduction to Geospatial Information Sciences (spring)	0	15	TA	1	3,750	teach labs; help students; attend lab prep meetings; grade assignments

CourseNumber	Sect	Type	Course Title	CR HR	Enr Max	Instructor(s)	TA	Cost	TA assignment
NRES 312	152	Lab	Introduction to Geospatial Information Sciences (spring)	0	15	TA	1	3,750	teach labs; help students; attend lab prep meetings; grade assignments
NRES 312	153	Lab	Introduction to Geospatial Information Sciences (spring)	0	15	TA	1	3,750	teach labs; help students; attend lab prep meetings; grade assignments
NRES 312	154	Lab	Introduction to Geospatial Information Sciences (spring)	0	15	TA	1	3,750	teach labs; help students; attend lab prep meetings; grade assignments
NRES 323	002	Lec	Natural Resources Policy	3	48	TBD	1	2,000	Grade papers and provide feedback, help in class with discussions
NRES 386	150	Lec	Vertebrate Zoology	3	50	Benson, John	1	9,000	Lead TA - schedule & attend weekly lab meetings; schedule field trips; teach labs; prepare quizzes/tests; grade work; drive van
NRES 386	151	Lab	Vertebrate Zoology	0	25	Benson, John	1	1,800	Hourly TA - attend weekly lab meetings; setup/take down labs; answer student questions; drive van on field trips, assist with lectures in labs and field trips
NRES 386	152	Lab	Vertebrate Zoology	0	25	Benson, John	1	1,800	Hourly TA - attend weekly lab meetings; setup/take down labs; answer student questions; drive van on field trips, assist with lectures in labs and field trips
NRES 418/818	151	Lab	Introduction to Remote Sensing	0	18	TA	1	4,167	teach lab; grade assignments (if new TA, attend lab prep meetings)
NRES 418/818	152	Lab	Introduction to Remote Sensing	0	18	TA	1	4,167	teach lab; grade assignments (if new TA, attend lab prep meetings)
NRES 420/820	151	Lab	Applications of Remote Sensing in Agriculture and Natural Resources	0	12	TA	1	4,167	teach lab; attend lab prep meetings
NRES 420/820	152	Lab	Applications of Remote Sensing in Agriculture and Natural Resources	0	12	TA	1	4,167	teach lab; attend lab prep meetings
NRES 433/833	001	Lec	Wildlife Management Techniques	3	60	Powell, Larkin	1	4,167	Grade papers, support lecturer preparation, facilitate in-class discussion; drive van, assist with field trip activities
NRES 441	001	Lec	Zoo Keeping and Management	3	30	Pennisi, Lisa		0	Per John Carroll - students need to drive vans
NRES 450/850	151	Lec	Biology of Wildlife Populations	4	60	Tyre, Drew			assist w/ instruction; grade papers

CourseNumber	Sect	Type	Course Title	CR HR	Enr Max	Instructor(s)	TA	Cost	TA assignment
NRES 453/853	001	Lec	Hydrology	3	40	Franz, Trenton			assist w/ instruction; grade papers
NRES 459/859	150	Lec	Limnology	4	24	Corman, Jessica	1		attend lectures & labs; schedule office hours to help students with homework; hold study sessions before each exam; setup/take down lab activites; grade assignments, papers, exams
NRES 463/863	001	Lec	Fisheries Science	3	24	Pegg, Mark	1		Present lectures, grade papers, help with field trip in lab, etc
NRES 468/868	150	Lec	Wetlands	4	30	Messer, Tiffany			
NRES 468/868	151	Lab	Wetlands	0	30	Messer, Tiffany	1		teach labs; schedule lab prep meetings; schedule field trips and van drivers; provide lectures on field trips; grade lab and other assignments
NRES 474/874	001	Lec	Herpetology	4	25	Ferraro, Dennis	1	4,500	Assist with Lab and all Field trips (9), drive university van, prepare live animals for labs, setup and grade lab exams
NRES 476/876	151	Lab	Mammalogy	0	24	Benson, John	1	4,500	prepare & present lectures, lab presentations; grade papers; drive van & assist with field trips
NRES 479/879	001	LEC	Hydroclimatology	3	23	Munoz-Arriola, Francisco	1	3,000	prepare & present lectures, grade assignments; facilitate in-class group activities & discussions
NRES 498/898	151	Lab	GIS for Ag & Natural Resources	0	18	TA	1	4,167	teach labs; grade labwork
NRES 498/898	152	Lab	GIS for Ag & Natural Resources	0	18	TA	1	4,167	teach labs; grade labwork
WATS 481/881	150	Lec	Stream and River Ecology	4	36	Thomas, Steve	1	3,000	Grade assignments, papers, exams; give 1-2 lectures during the semester

Total TA cost

159,754

Table 3. Results of online survey - January 2019

Instructor name	Course number	Course name	Credit hours	Number of sections in course	Expected number of students per section	When is your course offered?	How many hours per week (or per month or semester) of TA support do you need for this course? Please note that this refers to instructor-level support rather than administrative or clerical support.	Estimated total hours per semester (assume 20 weeks, Jan-May)	Breakdown of graduate TA hours associated with course activities for an average week	Qualifications are needed for your graduate TAs
Cory Forbes	NRES 109	Water in Society	3	1	65	Every spring	10 hrs/week	200	10 hrs/week	appropriate background in water science and effective teaching
Michael Ou	NRES 312	Introduction to Geospatial Information Science	3	2	73	Every semester (fall and spring)	10	200	30% lab teaching; 65% preparing lab and grading labs; 5% answering questions	responsibility
Michael Hayes	NRES 452/852	Climate and Society	3	1	20	Springs in even years	6 per week	120	6 per week	Knowledge of course material
Michael Hayes	NRES 370	Applied Climatology	3	1	15	Every fall	6 hours per week	120	6 hours per week	Knowledge of course material
Michael Hayes	NRES 478/878	Regional Climatology	3	1	15	Every spring	6 hours per week	120	6 hours per week	Knowledge of course material
Jessica Corman	WATS/BIO/NRES 459/859	Limnology	4	1	24	Every spring	18+ hr/week	360	per week: lab instruction assistance (4 hr), lab preparation (3 hr), lecture attendance (2.5 hr), office hours (2 hr), answering student questions (1 hr), posting lecture slides or other materials on Canvas (0.5 hr), mastering class material (2 hr), grading (3 hr)	Background in ecology or aquatic science, ability to drive a van, proficiency in Excel (and, eventually, R as the course is transitioned), excellent communication skills
Trenton Franz and Steve Thomas	WATS 281	Introduction to Water Science	3	1	60	Every fall	5 hours per week	100	Grade 4 homework assignments (5 hrs each), grade 3 exams (10 hours each), grade final exam (10 hours), hold office hours (2 hours per week)	Knowledge of course material

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Trenton Franz	NRES 453/853	Hydrology	3	1	25	Every spring	10 hours per week	200	Grade 8 homeworks (5 hours each), grade 3 exams (10 hours each), hold office hours (2 hours per week), deliver 1 or 2 lectures (4 hours of prep time and delivery)	Knowledge of course material
Betty Walter-Shea	NRES 208	Introduction to Applied Climate Science	3	1	40	Every fall	10	200	grading 4 projects in the semester, grading 3 exams and final exam, assisting with in class activities; assisting in creating exams; possibility of giving a lecture or two	background in course material
Betty Walter-Shea	NRES 408/808	Microclimate: The Biological Environment	3	1	25	Every fall	10	200	grading 10 homework assignments; assisting in grading exams; assisting with graduate student projects	Background in micrometeorology; background in the use of Excel
Leon Higley	NRES 220	Principles of Ecology	3	1	100	Every semester (fall and spring)	15-20	350	answering student questions, grading weekly quiz, grading assignments and exams	knowledge of ecology
Tiffany Messer	NRES 468	Wetlands	4	1	25	Every spring	10	200	lab preparation, grading, office hours, occasional laboratory teaching, reserving vehicles for field trips	knowledge of course material, ability to drive van

Instructor name	Course number	Course name	Credit hours	Number of sections in course	Expected number of students per section	When is your course offered?	How many hours per week (or per month or semester) of TA support do you need for this course? Please note that this refers to instructor-level support rather than administrative or clerical support.	Estimated total hours per semester (assume 20 weeks, Jan-May)	Breakdown of graduate TA hours associated with course activities for an average week	Qualifications are needed for your graduate TAs
Mark Pegg	NRES 463/463L	Fisheries Science	4	1	24	Every fall	60	60	TA prepares and leads half of the field activities associated with the lab that happens during fall break.	Knowledge of course material, ability to drive vehicle and pull trailer, instruction in methodologies used specifically for collecting data, etc.
Martha Shulski	NRES 104	Climate in Crisis	3	1	50	Every spring	4 hours per week	80	attending class, providing lectures in my absence, grading exams and homework, taking attendance	knowledge and understanding of climate and climate change
Mary Bomberger Brown	NRES 311	Wildlife Ecology and Management	3	1	95	Every spring	15-20 hours	350	3+ hours in class, 12+ hours grading and meeting with students	knowledge of course material
Mary Bomberger Brown	NRES 433	Wildlife Management Techniques	3	1	45	Every fall	12-15	270	3+ in class, 10-12 grading and meeting with students	knowledge of course material
Mary Bomberger Brown	NRES 233	Wildlife Field Techniques	1	1	60	Fall break class	50 hours for course	50	Friday through Tuesday	knowledge of course material, ability to drive a van
Judy Turk	NRES 477/877	Great Plains Field Pedology	4	1	18	Every spring	10/week	200	3-4 hour lab/field instruction, 2-3 hr grading, 3 hr lab prep, 1 hr other class prep	knowledge of course material and ability to drive a van
Jenny Dauer	SCIL 101	Science and Decision-Making for a Complex World	3	24	32	Every semester (fall and spring)	240 hrs per week (10 hrs a week per TA, 1 TA needed per recitation section)	200	Leading recitation, meeting with lecture instructor, student assessment, facilitating active learning in lecture	interest in teaching, organization skills, communication skills, critical thinking
Dennis Ferraro	NRES 211	Intro Conservation Biology	3	1	65	Every semester (fall and spring)	10 /week	200	Grading over 10 written assignments and 2 Exams ... per my grading rubric and supervision.	Understanding of conservation biology and ecology ... Best if have taken 1-2 courses in Conservation Biology.

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Dennis Ferraro	NRES/BIOS 474/874	HERPETOLOGY	4	1	25	Every fall	10 -12 /week	220	25 hr/semester - assisting with grading primarily exams. AND 60 -70 hrs/semester - assisting in lab sessions & field trips	Strong understanding of anatomy & morphology of herpetofauna; knowledge on identification of common No. American herpetofauna. IACUC training, General lab (dissection) procedure protocol; 12 passenger Van ability & approval. General field techniques regarding equipment for monitoring herpetofauna
Dennis Ferraro	NRES 348	Resolving Wildlife Conflicts	3	1	25	Every spring	40 -50 /semester	45	Assisting in grading assignments & exams	Knowledge of Wildlife Damage management procedures, equipment & laws
Dennis Ferraro	NRES 492	Tropical Ecosystems & Ecology	3	1	18	Every spring	2 hrs /wk plus 70hrs on spring break trip	100	2/wk grading & help prep students 24/7 for Spring Break .. leading groups, assisting students w/ field work	Must 25+ yrs of age - ability to drive rental van in Puerto Rico IACUC trained, able to lead a team of undergrads in difficult field conditions
Joe Dauer	NRES 220	Ecology	3	1	110	Every fall	15 hrs per week	225	Attending class (3 hrs/week) to engage students Grading in-class worksheets (10 hrs/week) Office hours and administration (2 hrs/week)	knowledge of course material, good personal skills to engage students and provide meaningful feedback
Daniel Snow	NRES 475	Water Quality Strategy	3	1	25	Every spring	6	120	Online discussion board, some grading, presenting course tools	
							Maximum	360		
							Average	180		
							Minimum	45		