



STUDENT HANDBOOK

GRADUATE STUDIES IN HYDROLOGIC SCIENCES

AT THE

UNIVERSITY OF CALIFORNIA DAVIS

JULY 2020

PREFACE

This Student Handbook provides graduate students and prospective applicants with information about procedures, requirements, and activities for succeeding in the Hydrologic Sciences Graduate Group.

Many research questions go beyond the disciplinary focus of traditional academic departments. At UC Davis, graduate-student education, including research and coursework, may be organized as interdisciplinary graduate groups that include faculty from various departments and Colleges, giving students broad flexibility in areas of research from across campus. The breadth of Graduate Groups means that students need to do extra “legwork” to learn about the faculty available to them and then seek out those faculty to forge collaboration.

Graduate study in Hydrologic Sciences at the University of California, Davis, is administered by the **Graduate Group of Hydrologic Sciences** under the supervision of Graduate Studies and the Hydrology Program within the Department of Land, Air and Water Resources. The Graduate Group of **Hydrologic Sciences** is composed of faculty with research interests in hydrologic processes and includes members of the Departments of Biological & Agricultural Engineering, Agronomy & Range Science, Civil & Environmental Engineering, Environmental Science & Policy, Geology, and Land, Air & Water Resources. The size and diversity of interests of the faculty give unusual breadth to the program and allow specialization in physical hydrology, earth surface processes, hydrobiology, hydrochemistry, or water policy & management. Fundamental hydrologic processes associated with natural events and human activities are stressed.

You may obtain more information about the Graduate Group on our website (<https://www.hsgg.ucdavis.edu/>) and on admission requirements for advanced degrees, availability of financial assistance to graduate students, graduate group administration, and other topics by contacting Shila Ruiz <shruiz@ucdavis.edu>, Student Affairs Officer, 1152 Plant and Environmental Sciences Building, University of California at Davis, Davis, California 95616. Her phone number is (530) 752-1669.

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1. HYDROLOGIC SCIENCES GRADUATE GROUP VISION STATEMENT

With a growing awareness of water's fundamental role in the global ecosystem and rapidly increasing demands on water resources resulting from growth in global population, there is a recognized need for a broad new approach to hydrologic sciences. In 1991 the National Research Council, pointing to a shortage of qualified hydrologists in both the short term and the foreseeable long term, called for *Hydrologic Science* to be formulated as an independent scientific discipline with distinct training and research programs to bring about "a coherent understanding of water's role in the planetary-scale behavior of the earth's system." An array of public and private institutions have noted that the next frontier in hydrologic sciences lies in the integration between disciplines, and the evaluation of linked physical, biological, and chemical processes at various spatial and temporal scales.

The **Hydrologic Sciences Graduate Group (HSGG)** was established in Fall 1991 to provide a comprehensive, unified hydrologic science curriculum with a new multidisciplinary emphasis that takes advantage of the broad range of expertise in water-related disciplines on the Davis campus. The resulting program incorporates a vigorous integration of chemistry, physics, biology, ecology, geology, law, social sciences, soil science, engineering, mathematics, and atmosphere science. This design broadens the skills and knowledge of the natural science or engineering student interested in any aspect of water-related phenomena. The program expands the boundaries of hydrologic science to encompass water-related phenomena at every scale of space and time – from the microscopic to the watershed, the continental, and the global, and from fleeting events to seasonal cycles and global climate change evolving over centuries. The need for broadly trained hydrologic experts is urgent, and career opportunities are both wide-ranging and relatively independent of economic cycles.

The HSGG program draws on the historic strengths of several water-related educational and research programs on campus. The university currently houses a broad array of nationally and internationally renowned faculty involved in water-related research: a breadth and depth of expertise unmatched within the UC system, and among the strongest in the United States. Along with the intellectual resources, the campus currently houses several key programs that support water-related data assembly, storage and dissemination. The university has a well-established history of agency collaboration, forming the foundation for future growth and diversification. Presently, 43 faculty from 6 different departments across 3 separate colleges/schools identify participation in the Graduate Group. There are external faculty members affiliated with UC Merced and federal research laboratories. The HSGG offers degree specialization in physical hydrology, earth surface processes, hydrobiology, hydrochemistry, and water policy & management at the M.S. and Ph.D. levels.

The primary goal of the HSGG is to prepare rigorously trained scientists that have a quantitative foundation in the profession of hydrology and a multidisciplinary perspective across allied *Hydrologic Sciences*. Our Ph.D. graduates have been successful in obtaining faculty positions and post-doctoral positions at leading universities (e.g. Michigan State, Duke Univ., Iowa State, Univ. of Virginia, Univ. of Nebraska, Univ. of New Mexico) and research agencies (USGS, LLNL, USDA Agric. Research Service). Our M.S. graduates are sought after for positions with private, state and federal agencies and several have gone on to Ph.D. programs and eventually faculty positions of their own (Utah State, Univ. of Cardiff, etc.). Employers frequently contact our faculty

seeking top recruits for their job openings. The strong reputation of the Group attracts several international students who return to their countries where they become recognized leaders in the hydrologic sciences.

2. HSGG GOVERNANCE

HSGG administration is governed by bylaws approved by the UCD Graduate Council on December 16, 2011. HSGG administrators include the Group Chair, the Graduate Advisors, and the Admit Advisor. HSGG standing committees include the Executive Committee, Admissions Committee, Scholarship Committee, and Seminar Committee.

Hydrologic Sciences Graduate Group Administrators

Group Chair

Thomas Harter
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Graduate Advisors

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Admit Advisor

Sam Sandoval
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Hydrologic Sciences Graduate Group Committees, 2020-2021

Executive Committee

The voting members are Pramod Pandey, Helen Dahlke, Samuel Sandoval Solis, and Steven Sadro. Nonvoting members include the student affairs officer and the graduate student representative. Graduate advisors are ex officio members.

Admission Committee

Samuel Sandoval Solis (Chair), Thomas Harter (Group Chair), and Peter Hernes

Scholarship Committee

Samuel Sandoval Solis (Chair), Mark Grismer (past Chair), Da Yang

Seminar Committee

Majdi Abou Najm (faculty rep) and appointed graduate students.

3. TYPICAL PREPARATION FOR GRADUATE STUDIES IN HYDROLOGIC SCIENCES

Students seeking advanced degrees in **Hydrologic Sciences** typically enter the program with an undergraduate degree in a science or in engineering field that required a year of calculus, courses in statistics, computer programming, physical geology, and hydrology, plus additional courses in in basic biology, chemistry, physics, differential equations, microeconomics, public policy, or ecology, depending on the specialization selected. Although students are occasionally accepted into the **Hydrologic Sciences** Graduate Group without having completed all required preparation, such preparation is strongly encouraged of applicants. Admission into HSGG without completion of preparatory courses does not constitute a waiver of those requirements. All incoming students are required to complete their prerequisite coursework during their graduate education, as specified in the Degree Requirements. HSGG courses include both upper division undergraduate courses and graduate level courses designed to take advantage of a suite of basic skills that are taught in lower division prerequisites. Non-preparatory coursework may not be used as the basis for waivers out of prerequisites, as they build on those courses and do not teach the fundamentals. Further, courses that are in the same discipline as a prerequisite but contain different content may not be used for a waiver out of prerequisites. Waivers are intended for unusual extenuating circumstances and should be requested in writing to the assigned Graduate Advisor.

4. ADVANCED DEGREES IN HYDROLOGIC SCIENCES

Students may pursue M.S. (under Plan I or Plan II) and Ph.D. Degrees in the Hydrologic Sciences Graduate Group. Under either degree plan, prerequisite courses not taken prior to entry into the program must be completed during the course of study. Requirements of Graduate Studies (<https://grad.ucdavis.edu/admissions/admission-requirements>) including residency and limitations of transfer units must be fulfilled along with the following requirements. The M.S. degree program follows a regular structure outlined below, while the Ph.D. program is designed by the student in

collaboration with his Guidance Committee. A complete guide to the Hydrologic Sciences Graduate Group Ph.D. and M.S. Degree Requirements can be found online at <https://www.hsgg.ucdavis.edu/requirements>.

5. APPLICATION FOR ADMISSION

Learning about HSGG

Most prospective graduate students use the internet to search for potential graduate education opportunities. Prospective students are encouraged to visit our website <https://www.hsgg.ucdavis.edu/prospective-students>. Because many graduate students have their educations funded by research, the key difference between evaluating undergraduate and graduate programs is that you need to put a stronger emphasis on finding a faculty mentor who shares your research interests, uses a mentoring style that meets your individual needs, and has openings for new students for the year you wish to matriculate. Visit the HSGG webpage that lists our faculty, their interests, and their email address to find out who might be a match for you, and then please contact them directly. Faculty expect applicants who want to train with them to seek them out individually and engage them- do not rely on the formal application process alone and hope faculty will identify your potential without any prompting. That can happen, but the more effort you make to get to know potential mentors, the better chance faculty have to understand your merits.

Detailed information about all aspects of graduate education at UC Davis may be obtained on the Graduate Studies home page <http://www.gradstudies.ucdavis.edu/>.

Application is made through the UC Davis Graduate Studies online application system. Please visit http://gradstudies.ucdavis.edu/prospective/apply_online.cfm.

HSGG Admission Requirements

HSGG admission is based on:

1. Academic background and at least a 3.0/4.0 grade point average. Particular attention is given to the scope of the applicant's preparation and performance in courses that constitute basic preparation for advanced study in Hydrologic Sciences.
2. Verbal, quantitative and analytical Graduate Record Exam scores. Subject exams are not required. (Waived for admission during 2020-21 due to COVID-19 pandemic).
3. Three letters of recommendation in support of application.
4. TOEFL scores for applicants whose primary language is not English. A score of 550 is the minimum accepted by the group.
5. Identification of a HSGG faculty member willing to serve as Major Professor.

Graduate Showcase – Graduate Recruitment Event

The HSGG and its sister graduate groups in LAWR, Atmospheric Science and Soils and Biogeochemistry, invite a select group of applicants to the Graduate Showcase, an annual two-day recruitment event in late February or early March. This is an opportunity for prospective students to meet faculty and continuing students, visit our programs and research labs, and tour the UC Davis campus and surrounding area. Invitation to the Showcase does not guarantee admission, funding, or a place in a faculty member's lab group.

HSGG Admission Process

The following is a general step-by-step description of the admissions process.

Step 1: Prospective students explore graduate programs and identify HSGG as a possible venue.

The first step is to then visit the UC Davis Office of Graduate Studies website, which provides the official Steps to Applying.

Step 2: Using the HSGG website, applicants learn about faculty who may have common research foci, and then investigate the faculty of interest using faculty's individual web pages and publications. Applicants are encouraged to contact individual faculty to introduce themselves and learn if the faculty member is taking new students in the coming fall. When contacting faculty (usually by email), prospective students should include a resume and transcript copy and personalize their message to demonstrate their understanding of the faculty's research and teaching in relation to their own interests. Prospective students that have their own scholarship to fund their graduate studies or that intend to self-fund their graduate studies (typically for a Master's II option) should clearly articulate that option when corresponding with faculty. For general questions, prospective students may also contact the Hydrologic Sciences Graduate Group office.

Step 3: Submission of an online application. The following bullets should be carefully considered in the application as their completion affects how easily faculty will recognize potentially well-matched students.

- Applicants are strongly encouraged to first familiarize themselves with the HSGG Degree Requirements, including degree specialization options. HSGG has some general prerequisites (applying to all specializations) and additional specialization-dependent prerequisites.
- We strongly recommend that applicants fill out the HSGG prerequisite spreadsheet. The sheet can then be used to copy the information into the application website and for quick reference during the application review period, should questions arise. Importantly, the list of prerequisite courses provided in the application should include courses scheduled to be taken after the application submission but prior to the beginning of graduate school.
- Election of the Areas of Interest: In the application form, areas of interest are organized by the degree specialties offered. We strongly suggest that applicants carefully select options that encompass the breadth of their interests. It is not necessary (or advantageous) to only pick a top priority if other topics are of interest as well.
- The prospective student must arrange for all required documents to be sent to UC Davis. Transcripts from every higher education institution must be submitted, among other things. HSGG cannot make an admissions decision until the application is complete. It is the applicant's responsibility to ensure that their application is complete.

- Step 4:** UC Davis fellowship and scholarship applications must be complete and received by January 5 for an applicant to be considered for a variety of potential fellowships. This deadline does not apply to fellowships granted directly by HSGG or to research-driven funding from external sponsors to our faculty, although all applicants are strongly encouraged to meet the January 5 deadline.
- Step 5:** Once the application is submitted online, it is available for individual HSGG faculty to review.
- Step 6:** The HSGG admissions committee ranks fellowship applications and submits rankings to Graduate Studies by required deadline.
- Step 7:** The HSGG admissions committee ranks all HSGG applications by mid-January. This ranking determines which applicants will be invited to the HSGG Showcase. As more applications come in, these are slotted into the existing rankings, but they may be too late to invite for the Showcase. Other students may visit HSGG on their own or at the request and funding of an individual faculty member.
- Step 8:** Unqualified applicants who do not meet University and HSGG admissions requirements are identified in applicant rankings.
- Step 9:** LAWR hosts the “Graduate Showcase” for the highest ranked applicants in mid February.
- Step 10:** The Applicant rankings are sent to all HSGG faculty members periodically as they are updated in February and March for consideration as a guide to faculty to help them decide who to choose to accept. Each faculty member decides which applicants are most qualified for the specific research projects they have funding for. Most students have their educations funded by research grants from individual faculty.
- Step 11:** Applicants check with potential faculty mentors to learn what their admissions decisions are. Faculty may contact their top-choice students with more information, funding updates, questions, and/or further encouragement to accept at UC Davis.
- Step 12:** The general deadline to apply for HSGG admissions for the following fall quarter is May 1.
- Step 13:** In March the UC Davis Office of Graduate Studies reports to HSGG the list of any applicants who have garnered a fellowship offer. These offers are then announced to the applicant. Most applicants are notified of their selection by April 1.
- Step 14:** In accordance with Council of Graduate Schools Resolution subscribed to by UC Davis, admitted applicants cannot be required to accept admissions prior to April 15.
- Step 15:** Faculty inform the HSGG Admissions Committee of the list of applicants they intend to admit and mentor. This is an ongoing process March through June. HSGG encourages faculty to review all relevant applications and make timely decisions. If an applicant does not hear anything during this time, it most likely means that no faculty have the funding to pay for the applicant's education.
- Step 16:** The HSGG Admissions Committee works with individual faculty to use HSGG fellowship funds as part of funding packages for students to be admitted.
- Step 17:** HSGG notifies Graduate Studies of students to be admitted on an ongoing basis during February through June. The final decision on admission is the responsibility of the Dean of Graduate Studies upon recommendation of the HSGG. Graduate Studies sends formal admissions letters. HSGG sends offer letters explaining the details of who the faculty mentor will be, what the funding offer is, and what other sources of potential funding exist.

Step 18: As applicants accept or reject offers and as new research funding becomes more certain, faculty may accept more students. Consequently, qualified students may continue to be considered through June.

Step 19: By June 30 all students are either admitted or rejected.

- * "In accordance with applicable State and Federal laws and University policy, the University of California does not discriminate in any of its policies, procedures, or practices on the basis of race, color, national origin, religion, sex, sexual orientation, handicap, age, veterans status, medical condition (cancer-related) as defined in Section 12926 of the California Government Code, ancestry, or marital status; nor does the University discriminate on the basis of citizenship, within the limits imposed by law or University policy. In conformance with applicable law and University policy, the University of California is an affirmative action/equal opportunity employer."

6. BILLING, FEES, AND TUITION

Billing

The following list of resources will help with student billing and accounting.

- To view your outstanding account balance using SISWeb or MyBill, visit: <https://financeandbusiness.ucdavis.edu/student-resources/accounting/mybill>.
- For up-to-date information on fees, fee payment options, deadlines, late fees, etc., visit the Student Accounting Web site at <http://studentaccounting.ucdavis.edu>.
- You may contact the Student Accounting Office, 530-752-3646 or visit 2100 Dutton Hall.
- Or visit the Registrar's Web site, <https://registrar.ucdavis.edu/>.

Tuition and Fees

Please see the Graduate Studies web page <https://financeandbusiness.ucdavis.edu/student-resources/tuition-fees/graduate> for resident and non-resident tuition and fees. As a full-time graduate student you (or your funding sponsors) pay various fees for such services as the Graduate Student Association (GSA), campus improvement, safety, your health insurance (SHIP), and, of course, your education. To learn exactly what your fees are and where they go, visit <http://budget.ucdavis.edu/studentfees>. If your status is Registration in Absentia, which means your study requires you to remain outside California, visit http://www.gradstudies.ucdavis.edu/students/in_absentiaFAQs.html.

One-time Fees

One-time fees include application for admission fee, readmission fee, PELP, candidacy fee, Filing Fee. These fees change periodically; consult the graduate group coordinator or Graduate Studies at <http://gradstudies.ucdavis.edu/index.cfm> or the Registrar at <http://registrar.ucdavis.edu/> for current fee amounts.

Establishing California Residency

Domestic students funded by HSGG or its faculty are expected to establish residency after their first year. If you are a nonresident, are not able to establish California residency, you must pay nonresident tuition each quarter. Nonresident doctoral students who have advanced to candidacy before the first day of the term will receive 100% nonresident tuition remission. A Ph.D. candidate or professional doctoral student may receive the reduced nonresident tuition rate for a maximum of three years. Students who have not completed their doctorate after the three-year period and who remain enrolled students, will be assessed the full NRST in effect at that time.

As a California resident, you will not have to pay nonresident tuition. Therefore, it is to your advantage if you are a US citizen or have a green card to investigate the steps necessary to becoming a legal California resident. Begin the process as soon as you arrive and at least one full year before the start of the quarter in which you wish to be classified as a resident. For tuition purposes, physical presence and intent must be demonstrated for more than one year. Intent includes, but is not limited to, having a California driver's license or ID card, registering to vote and voting, using a California permanent address on all records, and paying state income tax as a resident.

During the quarter preceding the one for which you seek reclassification, pick up a petition from the Residence Deputy located in the Registrar's office, 12 Mrak Hall, 530-752-5029, <http://registrar.ucdavis.edu/html/slr.html#WhoResident>. Return the completed petition at least two weeks before the start of the quarter.

7. FINANCING YOUR GRADUATE EDUCATION

Several sources of financial aid originating from the University, Colleges, Departments and Graduate Group are available to new and continuing graduate students. They include general University fellowships and scholarships, work-study awards, loan and grant funds, departmental teaching assistantships, and faculty-sponsored graduate research assistantships. Smaller thesis-writing and research awards such as the Jastro-Shields awards are available annually. Most student funding comes in the form of research assistantships.

Free Application for Federal Student Aid (FAFSA)

Annually, all graduate students who are US citizens, permanent residents, or immigrants are required to file a FAFSA, preferably by the priority filing date of March 2. This form is submitted directly to the US Department of Education and determines your financial need. It is used for consideration of fellowships, block grants, stipends, loans, and Work Study funds that pay some GSR salaries. FAFSA is available at the UC Davis Office Financial Aid in Dutton Hall or online at <http://www.fafsa.ed.gov>. Include UC Davis School Code 001313 on the FAFSA.

International Student Requirements

International students are advised to consult Services for International Students and Scholars (SISS) at <http://siss.ucdavis.edu/> regarding immigration status and employment.

University Aid

University Fellowships and Scholarship awards are based on scholarship and promise of outstanding achievement. Specific information concerning these awards is contained in the application form sent to U.S. citizens or may be obtained from Graduate Studies <http://www.gradstudies.ucdavis.edu/ssupport>. For additional information on loan funds, grant funds, and work-study programs, contact the Financial Aid Office, Voorhies Hall, University of California, Davis 95616, (530) 752-9246. The Office of Graduate Studies has a web site (<http://www.gradstudies.ucdavis.edu/students/handbook/index.html>) with additional information.

College Aid

Each College associated with faculty of the Group (e.g. College of Agricultural & Environmental Sciences (CA&ES), College of Engineering, and College of Letters & Science) offers a variety of thesis and small research awards that stem from foundation and benefactor support funds. These awards often have particular requirements. Announcements will be made by HSGG to alert students about specific opportunities in advance of proposal submission deadlines. The student is also encouraged to contact the Student Affairs Officer or the Chair of the Scholarship Committee for more information.

Departmental Aid

Departments use student support primarily for teaching assistance and secondarily for administrative work. Teaching related student support for qualified students is on a one-quarter basis and comes in the form of either Teaching Assistantships that pay a stipend and cover in-state fees or part-time course reader positions that pay a stipend. Faculty whose courses need TAs or readers are responsible for advertising available positions, and usually do so by sending announcements to the HSGG student listserv and posting fliers outside the offices of the HSGG Student Affairs Officer and undergraduate Staff Advisors. Staff are knowledgeable about the recurring positions available each year. Application for these positions is made to the course instructor on forms available from the Student Affairs Officer.

Faculty Research Grants

Faculty garner grants from Federal, state, non-governmental, and other sponsors to conduct their research. Student support on research grants comes in the form of a Graduate Student Researcher (GSR) position. HSGG has a uniform compensation plan for all graduate students, so everyone conducting research is paid the same amount. Grants that pay GSRs are expected to pay the non-resident tuition for non-resident students, but sometimes faculty write budgets assuming that the student will be from California, creating a deficit if a non-resident student eventually takes the position. Usually faculty seek to fill their GSR positions with HSGG applicants, but they may also hire and mentor continuing students. Compensation of GSRs is uniform for all GSRs in the Hydrologic Sciences Graduate Group. Information can be found in the approved [Compensation Plan](#) and corresponding [current salary amounts](#).

Graduate Group Aid

HSGG administers funds to help incoming and continuing graduate students using two primary

sources. First, Graduate Studies provides an annual allocation known as Graduate Program Fellowships (formerly “Block Grant”) on the basis of a formula that considers the number of students in the graduate group, among other factors. Second, CA&ES annually provides Jastro Research Endowment Award funds to HSGG, which in turn can provide students whose faculty are in CA&ES with either Henry A. Jastro Graduate Research Awards (up to \$3000 towards supplies and/or travel for a maximum of 3 times per student) or Henry A. Jastro Student Support Awards that can cover student stipends, in-state fees, and non-resident tuition (except when a student has a GSR position). HSGG administered funds for incoming students are allocated during the admissions process- no special applicant is required. For continuing students, a call is made each fall or winter for competitive proposals that are ranked by the Scholarship Committee. The Group Chair receives the rankings and then funds as many as possible within the budget. Other than these two sources of funding, HSGG may periodically have student support funding from donations made to the group. Any one may donate to the graduate group. For more information about making donation, contact the Group Chair.

Work Study

The federal government pays for a percentage of the costs of research employment, including wages and fee remission. You must complete the application for various types of financial aid, available on the Financial Aid Web site at <http://financialaid.ucdavis.edu>. You must also have submitted a FAFSA, <http://www.fafsa.ed.gov>. HSGG determines recipients of Work Study awards.

Loans

Information available at Financial Aid, <https://financialaid.ucdavis.edu/>.

Travel Grants

Graduate Studies offers a limited number of travel awards twice per year for travel to professional meetings. You will be notified of application due dates throughout the year. The amount of the award varies depending on how far you are traveling. You are only eligible to receive this award once. For more information, visit <https://grad.ucdavis.edu/current-students/financial-support/internal-fellowships/travel-awards>.

Travel Grants through the Graduate Student Association (GSA)

The GSA also offers a limited number of travel awards twice per year. (You cannot receive a GSA travel award if you have received an award from Graduate Studies for the same instance of travel.) Email for details: gsavicechair@ucdavis.edu.

Other Employment

The graduate group coordinator will distribute employment information to students as positions are advertised. For more information about employment opportunities or professional development services, you can meet with a coordinator in the Graduate Student and Postdoctoral Career Services program area of the Internship and Career Center, located in South Hall, or call 530-752-7841 to schedule an appointment. Also, as part of Financial Aid, the Student Employment Center coordinates employment opportunities, including community service jobs.

Visit <http://jobs.ucdavis.edu>, or call 530-752-0502.

Online Funding Resources

- The Foundation Center, <http://foundationcenter.org>
- UC Davis External Fellowship Programs and Grant Announcements, <https://grad.ucdavis.edu/financial-support/external-fellowships>.

Online Grant Writing Resources

- The Foundation Center, <http://foundationcenter.org>
- The Social Sciences Research Council, <http://www.ssrc.org>
- The University of California, Berkeley Dissertation Proposal Workshop, <http://globetrotter.berkeley.edu/DissPropWorkshop>

8. 2020-2021 GRADUATE STUDENT RESEARCH COMPENSATION PLAN

Information on the Hydrologic Sciences Graduate Group Compensation Plan and corresponding salary amounts can be found here: <https://grad.ucdavis.edu/sites/default/files/upload/files/facstaff/gsr-comp-plan/GHYS%20Hydrological%20Sciences%20April%202012.pdf> and https://grad.ucdavis.edu/sites/default/files/upload/files/facstaff/salary_19-20_october_1_2019.pdf.

9. FACULTY PARTICIPATION

All graduate students have a **Major Professor** who serves as the student's research and academic adviser. Graduate students are encouraged to have high expectations for mentoring by their Major Professor. In addition, three faculty including the Major Professor, the **Graduate Advisor** and another member at large of the HSGG serve on a **Guidance Committee** for each student to assist in developing a Program of Study. Plan I MS students also have a **Thesis Committee**. Students working towards a Ph.D. have a **Qualifying Exam** committee and after that a **Dissertation Committee**. Each individual and committee plays a role in helping a graduate student reach their educational goals and are described below. The Graduate Advisor plays a crucial role in answering questions about course schedule, degree requirements, and associated signing forms.

Major Professor

The Major Professor guides and directs a graduate student's research while assisting in locating and providing financial support for the student. A major professor is usually identified for each student as a condition of admission to the graduate program. Once in the program, students are allowed to select a new major professor among the faculty in the Graduate Group, but changing could impact funding availability and source. The choice is subject to mutual agreement by the student and the major professor.

Graduate Advisor

Graduate Advisors help graduate students understand and adhere to the degree requirements. The

Graduate Adviser also is available for advice on course requirements and academic concerns. Typically there is one for every 10-15 students. Graduate students are assigned a Graduate Advisor by the chair of the graduate group upon entry and are rarely assigned to their Major Professor or another faculty member with an overlapping area of research specialization. The Graduate Advisor serves as a liaison between the student, the Graduate Group and the Dean of Graduate Studies. The liaison role is to recommend examination, thesis and dissertation committee membership to Graduate Studies. The Graduate Adviser is also responsible for appointing a Guidance Committee and for completion of various official forms and documents such as the Advancement to Candidacy form and Qualifying Examination committee nomination form. These committees are described below.

Further information on the advising structure, mentoring, and committees are detailed in the current [HSGG Degree Requirements](#).

10. REGISTRATION AND COURSE ENROLLMENT

Registered Status

Registered student status requires that you be enrolled in a minimum of 12 units of coursework or HYD 299 (research) units and that you pay fees for the quarter. If you have not enrolled and have not paid fees, you are a non-registered student. If you are on Planned Educational Leave (PELP) or are on Filing Fee status, you also are considered a non-registered student.

How to Register

- Once you obtain your student ID, password, and personal access code (PAC), you may complete your course registration online through SISWeb, the university computer system, <http://sisweb.ucdavis.edu>.
- To learn how to activate your student ID, visit <https://registrar.ucdavis.edu/records/aggiecard>.
- Obtain your e-mail address and Kerberos password by visiting <https://computingaccounts.ucdavis.edu/cgi-bin/services/index.cgi>.
- To log onto SISWEB, you will need your Kerberos password and a personal access code (PAC). Initially, your PAC is your six-digit birth date. Once you access the system, be sure to follow the menu prompts to choose a new PAC. You will receive notification of registration dates by mail, and once you have the above identifiers, you can complete registration for classes online.

Class Schedule and Registration Guide

Consult the quarterly Class Schedule and Registration Guide at <http://registrar.ucdavis.edu> for registration dates and times, quarterly deadlines, course lists, wait list information, etc.

Late Registration

To avoid late fees and financial support problems, you must enroll, register, and pay fees in a timely manner. Keep in mind:

- If you add or drop a course after the add/drop deadlines, you will be charged a fee.
- Fees that are paid from sources such as fellowships and academic appointments will not be paid until you are registered for a minimum of 12 units. If you do not complete your registration by the last day to pay university fees, you will be charged a late fee.
- You may consult The University Catalog or Class Schedule and Registration Guide for add/drop deadlines, available at the <http://registrar.ucdavis.edu/>.

Units

For full-time status, you must enroll in at least 12 units per quarter, which can be any combination of upper division (100-level) or graduate course units (200-level); Seminar (290), Group Study (298), Research (299) units; or Teaching Assistant Training Practicum (396) units. The graduate group encourages you to enroll in more than 12 units (up to 16 total) of upper division and graduate courses combined, or for more than 12 units (again up to 16 units) of graduate level courses. Enrolling for great than 16 units requires the special approval of the dean of Graduate Studies.

Enrolling in Research (HYD 299)

HYD 299 is the course in which you enroll to receive credit for your research. The course registration number (CRN) is linked directly to the quarter and to your major professor/instructor, the individual with whom you are conducting research. There will be 3 more numbers in the CRN number depending on the faculty member involved (e.g., HYD 299-034). You may receive from 1 to 12 units, depending upon your research activity and course load and based upon the advice of your major professor and adviser. For your CRNs each quarter, contact the graduate group coordinator via e-mail, letting her know with whom you wish your CRN assigned and for which quarter.

Part Time Status

If you meet eligibility criteria, you may apply for part-time status, which is 6 units or fewer, through the Registrar, <https://registrar.ucdavis.edu/registration/part-time>.

Dropping Courses

If you want to drop a course after the 10th day of instruction, you must file a Permission to Drop Petition, available at <http://gradstudies.ucdavis.edu/forms/>.

Late Add

If you wish to add a course after the 12th day of instruction, you must have approval from the instructor or program. If permission is granted, go to the course/program department for a PTR (permission to register) number. Use SISWEB to add the course by using the issued number within three days. You will be charged \$3.00.

Temporary Study at Another UC Campus

If you're in good standing and have completed at least one quarter in residence at Davis, and you wish to study temporarily at another UC campus, you may obtain an application to the Intercampus Exchange Program, at <http://gradstudies.ucdavis.edu/forms/>.

11. GRADES

Repeating a Course for Improvement

With the consent of the adviser and the dean of Graduate Studies, you may repeat a course in which you received a grade of C, D, F or U up to a maximum of nine units for all courses repeated. In such repeated courses, only the most recently received grade and corresponding grade points shall be used in calculating your GPA, but all units attempted and grades received shall remain part of your permanent record.

Opting for S/U Grading

You may elect to take one normally graded course per quarter on an S/U basis provided the course is used to explore an area unrelated to your academic discipline and cannot be used to fulfill any of your graduate program course requirements. To receive an S grade in lower or upper division work, you must achieve at least a C-. To receive an S grade in a graduate course, you must receive a B- or better. S/U petitions must be filed with Graduate Studies by the end of the fifth week of the quarter. The form is available at <http://gradstudies.ucdavis.edu/forms/>.

Incomplete (I) Grade

If you are doing well in a course but are unable to complete the work because of illness, personal emergency, or other good cause, an Incomplete is appropriate. You must remove the Incomplete grade before the end of the third succeeding quarter, otherwise the grade will revert to an F.

12. PROBATION AND DISQUALIFICATION

If your performance is less than satisfactory or you are not meeting program requirements, you are placed on academic probation and given a timeline for removing your deficiencies. Academic probation can result in disqualification, which means you are no longer eligible to continue graduate study at UC Davis. (The term "disqualification" should not be confused with "dismissal." Dismissal is removal from graduate study based on behavior or conduct.) If you are subject to disqualification, you may submit an appeal within 30 days for reconsideration for cause to the Administrative Committee of the Graduate Council. More information can be found here: <https://grad.ucdavis.edu/academics/progress-and-academic-probation/warnings-probation-and-disqualification>.

13. TAKING A BREAK OR LEAVING CAMPUS

If you wish to take a break from your course of study or temporarily leave the UC Campus, you have the options listed below.

Planned Education Leave (PELP)

PELP status is available if you wish to take a leave for various reasons, including health issues, family crises, clarification of educational goals, or military service. PELP may be approved for a maximum of three quarters. An extension can be requested, form available at <http://gradstudies.ucdavis.edu/forms/>. International students must have their PELP status approved by the Services for International Students and Scholars (SISS), <http://siss.ucdavis.edu/>, prior to submission of the PELP application. PELP applications must be submitted to Graduate Studies no later than the first day of the quarter in which the PELP status is to begin. If you begin the registration process and then withdraw from registration after the first day of the quarter, you may be billed for fees owed or have to repay funding. The HSGG graduate group coordinator will help you initiate the application process.

Filing Fee

Filing Fee is a non-registered status available if you have advanced to candidacy for your degree. Filing Fee status maintains your eligibility to complete your degree while not registered. You can use this option when all of your courses and research have been completed and you no longer need to use campus facilities. Application forms and information are available at <http://gradstudies.ucdavis.edu/forms/>. Graduate Studies may approve a maximum of two quarters of Filing Fee status. Requests for extensions considered by application, are available at <http://gradstudies.ucdavis.edu/forms/>.

Registration in Absentia

Graduate students whose research or study requires them to remain outside California for the entire quarter may register in absentia and pay a reduced fee. Visit <http://gradstudies.ucdavis.edu/forms/> and click on “In Absentia” links.

Withdrawal

If aforementioned options are not appropriate for you, you may withdraw during the quarter by obtaining a withdrawal petition from the Registrar, available at http://registrar.ucdavis.edu/html/office_of_the_registrar_forms.html.

Readmission

If you drop out of the graduate program, but wish to return, you must file an Application for Readmission, available at <http://gradstudies.ucdavis.edu/forms/> at least six weeks prior to the beginning of the quarter in which you plan to enroll. HSGG requires additional documentation for readmission application. You should have a major professor identified and willing to serve in this capacity. That faculty member should notify the graduate group coordinator of the intent to readmit. Please see the graduate coordinator for additional details.

14. ENROLLMENT REQUIREMENTS FOR INTERNATIONAL STUDENTS

If you are a new international student, you will have an immigration hold that must be released by Services for International Students and Scholars (SISS) before you can complete registration. SISS

information is available at <http://siss.ucdavis.edu/>.

Prior to your first quarter of enrollment, if your native language is not English, and you have an undergraduate degree from an institution at which English is not the primary language of instruction, you are required to take the English examination given by the English as Second Language (ESL) office. More information is available at <https://iae.ucdavis.edu/>. Results of this exam will determine what, if any, ESL class you will be required to complete.

15. THE COMMENCEMENT CEREMONY

If you receive your graduate degree in September, December, March or June, you are eligible to participate in the annual commencement ceremony held in June. Immediately following the ceremony is a reception for degree recipients and their guests. In April, Graduate Studies will send you information about commencement.

16. GRADUATE SCHOOL RESEARCH GUIDANCE

Department Staff and Administrative Clusters

Graduate students are predominantly employed by their departments and should consult departmental websites to be informed about personnel, space, equipment, information technology, and safety issues, among other things. Departments are now often served by administrative clusters, so you should find out which cluster your department belongs to and which staff in the cluster perform which functions. Administrative clusters may require you to update your funding status quarterly, turn in time sheets, or other activities. Computers may need to meet specified requirements to participate on the departmental network.

Being an Organized Researcher

The following text is excerpted from the book 2D Modeling and Ecohydraulic Analysis (by Professor Greg Pasternack, published by Createspace, Seattle, WA) with permission of the author.

“Over the 13 years I have been a professor, I have noticed a phenomenon in which my students and I are pretty good about documenting what we do outside with our field work as river scientists, but we are terrible at keeping track of what we do digitally in processing and analyzing data. One graduate student I know repeated an arduous spatial analysis three times over two years, because each time he was unsure how he did it before, since he took no notes, and then since he was always starting over when he came back to that work, then he never got any where with it. I have noticed a similar pattern to that with many people doing GIS and other spatial analyses over the years. People do a rough analysis, then set it aside for a later write-up, and then when they go to write it up they have no idea what they did, so then they try to re-do it with variable success. Many people either do not consider whether their file contents and organization are clear or they assume that everything is self-evident, but often they are not. Some people do no organization at all, simply accruing hundreds to thousands of files in each folder with no hope of ever figuring anything out later, just trying to move forward by sheer momentum and prayer.

As bad as the efforts are with simple spreadsheets and text files, the situation has gotten much worse with GIS and 2D modeling. Now calculations are not done with formulas on a spreadsheet, but by a series of irreversible, untrackable, non-reproducible steps. One ends up with a folder full of intermediate files that make sense as you go through (sometimes), but a few months later have no meaning at all. ArcGIS 10 software and some other programs include methods for recording and documenting steps, but those are the exceptions, not the rule. Also, one still has to choose to use those tools as part of their workflow.

Over the years I have had the debate several times with different people as to the merits of work speed versus thoroughness of transparency via organization and documentation. I do not believe that good science or engineering comes from poor organization. It is human to make mistakes, there is no fault in that. What distinguishes science is that the analyses need to be transparent, reversible, and reproducible, so anyone can see how something was done and do it themselves with their own data. That is one motivation for writing this book in the first place, to have a documented, standardized approach to 2D modeling and ecohydraulic analysis. Ultimately, I no longer value the concept that it slows one down too much to take thorough notes, which is a common complaint I hear. My experience is that things have to be redone at least once most of the time and often many more times than that. The time-savings in avoiding note-taking is more than offset by the lost time in re-doing work over and over, and at a slower rate trying to reconstruct past efforts by oneself or predecessors.

As a result, I strongly advise you to log all of the steps you do in any and all analysis in a digital records file. The best approach is to document steps in a text file kept open side-by-side with the working files for a project. This is the equivalent of a lab notebook. Further, after an analysis is done, then a "readme" file should be created in the folder stating the name of every file in the folder and a one-sentence description of what each file is. Taking these measures is an important part of quality assurance in good professional practice. ”

In addition to being organized in how you do your research and how you track your activities, it is important to name your computer files, so that each file is unique and of known vintage. Hard disks have a way of corrupting creation and modification dates of files, so do not rely on operating systems to provide critical information. Some good research on naming computer files is available at http://www.macworld.com/article/1167126/how_i_name_files_on_my_mac.html.

17. GRADUATE SCHOOL LIFE RESOURCES

Health Insurance

UC requires that all registered students have health insurance. The Graduate Student Health Insurance Plan (GSHIP) is designed specifically for UC Davis students, providing medical, dental and vision benefits. Registered students are automatically enrolled in GSHIP. Students with comparable health insurance may waive participation through the online waiver application. GSHIP coverage, fees, policies, enrollment of eligible dependents, and waiver application are available at <https://shcs.ucdavis.edu/insurance/ship-benefits-information>.

Graduate Student Association (GSA)

The UC Davis GSA is the officially recognized student government for the entire campus and serves to build community through activities and advocacy. Visit <http://gsa.ucdavis.edu/> or network with your fellow graduate students to learn who is your current HSGG representative.

Additional Campus Resources

- Graduate Studies: <http://gradstudies.ucdavis.edu/index.cfm>
- Library: <http://www.lib.ucdavis.edu/>
- Internship and Career Center: <http://iccweb.ucdavis.edu/>
- Counseling and Psychological Services (CAPS):
<https://www.ucdavis.edu/search/google/student%20health%20and%20counseling>.
- Student Disability Center: <https://sdc.ucdavis.edu/>
- Teaching Resources Center: <http://trc.ucdavis.edu/>
- Housing: <http://housing.ucdavis.edu/>
- Transportation and Parking Services (TAPS): <https://taps.ucdavis.edu/>
- Recreation: <https://campusrecreation.ucdavis.edu/>

18. PRINCIPLES OF COMMUNITY

Please visit <http://principles.ucdavis.edu/> for the UC Davis Principles of Community.

19. GRADUATE STUDENT BILL OF RIGHTS AND RESPONSIBILITIES

There is a Graduate Student Bill of Rights. Please visit the website at <https://gradstudies.ucdavis.edu/sites/default/files/upload/files/current-students/gradstudentrights.pdf>.