

GRADUATE PROGRAM INFORMATION

EARTH AND PLANETARY SCIENCES

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

This document summarizes university, campus, and departmental policies, to assist you in planning and completing your graduate program in Earth and Planetary Sciences at UCSC. The information presented is limited, and rules and guidelines may change periodically. Please be sure to visit the UCSC Graduate Division website for more details (<http://www.graddiv.ucsc.edu>). On matters of formal requirements, the general catalog (<http://reg.ucsc.edu/catalog/>) is authoritative. Further information on institutional requirements for graduate students may be found at <http://graddiv.ucsc.edu/current-students/academic-regulations/graduate-student-handbook/index.html>.

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I. Departmental Personnel

Here are a few of the people in the department with whom you should become familiar as soon as possible, if you have not done so already. If you have questions or needs related to your graduate program and can not find answers online or in other materials, these are some of the folks to contact for guidance. There are many other people who can be helpful and are responsible for other aspects of departmental

resources and policies, many of whom will be introduced during the Orientation Meeting. Please visit the department web site (<http://eps.ucsc.edu/>) for a complete list of personnel and their contact information.

Jennifer Fish	Staff Graduate Advisor E&MS A251	831-459-1235 jmsfish@ucsc.edu
Jeremy Hourigan	Faculty Graduate Advisor E&MS A221	831-459-2873 hourigan@ucsc.edu
Quentin Williams	Department Chair E&MS A212	831-459-3132 qwilliam@ucsc.edu
Grace Caslavka	Department Manager E&MS A233	831-459-4478 gcaslavka@ucsc.edu

Jennifer Fish, the Staff Graduate Advisor, is the first person to contact with questions about administrative issues and forms. She is also knowledgeable about many aspects of financial aid and courses, and works with the Faculty Graduate Advisor to make TA assignments. Jeremy Hourigan, the Faculty Graduate Advisor, represents the department in matters of academic and degree policy, approves course plans and committees, and helps solve problems under unusual circumstances. Quentin Williams deals with department-wide matters. Grace Caslavka manages the front office staff and is also well versed in departmental and university practices. Please be sure to introduce yourself to our Department Assistant, Amy Kornberg (amylkorn@ucsc.edu), who assists with front office activities such as class scheduling, personnel appointments, A/V equipment, copying, mail and shipping.

Of course, the person with whom you should be most familiar with is your Primary Academic (Faculty) Advisor, the person who made a commitment to supervise your progress when you were admitted to the department. Unlike some departments where students are admitted "at large," in UCSC Earth and Planetary Sciences a faculty member must be prepared to take responsibility for each graduate student admitted. This generally involves having made a financial commitment, but it is most important for providing research guidance and helping with selecting courses, securing fellowships, writing proposals, providing career advice, and other mentoring tasks. Your success as a graduate student depends to a large extent on maintaining a positive relationship, including clear communication, with your Primary Academic Advisor. If you find this difficult, please talk to Jeremy and/or Jennifer as soon as possible. Also, be sure to advise Jeremy and Jennifer immediately if you switch your Primary Academic Advisor. Remember: you cannot remain in good standing in the department without having a Primary Academic Advisor.

Conflicts of Interest

As we are a small department, occasionally there will be conflicts of interest in our roles. For instance, if you are having problems with your advisor, who happens also to be the graduate faculty advisor, you may need an additional resource. In these circumstances, the previous graduate faculty advisor (the graduate faculty advisor emeritus) has authority to deal with the problem. Currently the graduate faculty advisor emeritus is Susan Schwartz.

II. Coursework Requirements

All graduate students (except those in the coursework MS program) must enroll in **EART 203, Introductory Teaching Seminar** (1 unit) fall quarter of their first year. The following required courses

for the standard curriculum should also be taken in the first year: **EART 204, Fundamentals of Earth and Planetary Sciences** (5 units, fall quarter), and **EART 206, Great Papers in Earth and Planetary Sciences** (5 units, winter quarter).

You are also required to take at least one subject course focusing on specific EPS content and one analytic course focusing on a method. Both courses must be formal courses based on lectures with graded assignments. Courses within the department must be at the graduate level; courses outside the department can satisfy if they are taught at a level higher than that required of our undergrad majors. A set of appropriate courses for each requirement is in the table below. This list is *not* exhaustive and tends to change over time. *Please use this list as a starting point, and make sure you consult the course catalog and primary faculty advisor to determine other possibilities that might be appropriate for your study plan. A final decision on appropriate courses will be reached in the advising session (see below). The approved course plan is authoritative on requirements.* Please note that you must take at least two distinct courses for these requirements.

Examples of Courses Meeting the Department Requirements

Subject Courses	Analytic Courses
<p>EART 207. Tectonics EART 208. Methods in Paleoclimatology [not currently offered] EART 209. Solid Earth Geochemistry [not currently offered] EART 210. Overview of Stellar and Planetary Formation and Evolution EART 213. Biogeochemical Cycles EART 220. Ground Water Modeling EART 231. Igneous Petrology [not currently offered] EART 254. The Climate System EART 262. Planetary Interiors EART 263. Planetary Surfaces EART 264. Planetary Atmospheres EART 270. Global Seismology EART 272. Geophysical Fluid Dynamics EART 275. Magnetohydrodynamics</p>	<p>EART 229. Isotopic Methods in Environmental Science EART 251. Photogrammetry EART 265. Order of Magnitude Estimation EART 266. Geological Signal Processing Any math methods course at a level higher than multivariable calculus. Common AMS, Math and Physics choices are included below. AMS 100. Mathematical Methods for Engineers III AMS 132. Statistical Inference AMS 147. Computational Methods and Applications AMS 206. Bayesian Statistics AMS 211. Foundations of Applied Mathematics AMS 215. Stochastic Modeling in Biology AMS 245. Spatial Statistics ASTRO 235. Numerical Techniques ASTRO 260. Instrumentation for Astronomy CHEM 122. Principles of Instrumental Analysis [Note: this course is very difficult to get into] CHEM 246C. Computers and Information Processing in Chemistry BIOE 286. Experimental Design and Data Analysis ENVS 215A/L. Geographic Information Systems and Environmental Applications MATH 106. Systems of Ordinary Differential Equations MATH 107. Partial Differential Equations OCEA 215. Predicting the Atmosphere, Ocean, and Climate OCEA 260. Introductory Data Analysis in the Ocean and Earth Sciences (also listed as EART-260) PHYS 116ABC. Mathematical Methods in Physics PHYS 160. Practical Electronics PHYS 242. Computational Physics PHYS 250. Mathematical Methods</p>

Other course requirements are tailored to the individual student's academic background, professional experience, and plans for research (see course plan advising session below). Research Master's degree students must take a minimum of 35 units of graduate and upper-division undergraduate courses, (including the courses mentioned above), of which no more than 15 units may be upper-division undergraduate courses. Of the required graduate-level courses, a minimum of 20 units must be courses other than supervised research (EART 297) except by special exception of the Graduate Council. There is no minimum course unit requirement (except the courses mentioned above) for Ph.D. degrees, but students generally take more courses during the first year or two in the department. Students entering with a Bachelor's degree usually need to broaden their background by taking additional courses in areas of undergraduate deficiency or in areas related to thesis research interests, whereas students entering with an M.S. may be more focused on acquiring specific research skills. Additional courses in the sciences may also be helpful. During the first year, students typically take three 5-unit courses per quarter or two courses and one 5-unit independent study associated with their research. You should prepare a course plan for your first year as soon as possible with your Primary Academic Advisor. Also, be sure to discuss with your advisor how your independent research (EART 297) progress will be evaluated, so that there will be no misunderstandings at the end of the quarter. It is a good idea to agree on specific goals in writing, and to meet periodically to assess progress throughout the quarter.

Earth and Planetary Sciences students occasionally take courses at another campus and transfer them for credit to UCSC, although usually not in their first year. Such a course must fill a clearly defined need in your academic plan and contain material unobtainable at UCSC, and you will need departmental approval in advance. Generally no more than three such courses will be approved per graduate student per year.

Graduate students are also required to enroll in and attend **EART 293, Graduate Research Seminar** (1 unit) in spring quarter each year. During each seminar, 2-3 graduate students (generally in their 2nd, 4th, and occasionally 6th year) give oral presentations on current or anticipated research and are critiqued by their peers (for both content and presentation). The primary purpose of this seminar is to give students practice in presenting research results. Students should prepare carefully and practice for these seminars. UCSC Earth and Planetary Sciences graduate students have received a large number of awards for presentations at national and international meetings, and we think the EART 293 course has helped contribute to this. In addition, it helps keep the entire department aware of what kinds of research projects are planned or underway.

Graduate students are expected to enroll quarterly and attend the weekly **EART 292-01, Whole Earth Seminar** (Tuesdays at 3:30pm). You should also consider the more specialized seminar, **EART 292-02, EPS/IGPP Seminar** (Fridays at 12:00pm) for at least your first year. These seminars are coordinated by faculty and graduate students to bring researchers from other institutions and organizations to give talks and interact informally with Earth and Planetary Sciences students, researchers, faculty and staff. In addition, most visitors are happy to meet with interested students. Be sure to contact the seminar host if you are interested in meeting with a speaker, and tell the organizers if you know of excellent speakers we should bring to give a talk.

III. Degree Milestones and Requirements

A. Time to Degree

The length of time spent in graduate school varies from student to student, but the department and Graduate Division have clear expectations. It generally takes four to six years to complete a Ph.D., and two to three years to complete a research M.S. The coursework M.S. degree is generally completed in one year. If UCSC graduate students in the physical sciences take more than six years to complete a Ph.D. or more than three years to complete a research M.S., there can be negative impacts for the student and department, including loss of funding. Exceptional circumstances sometimes result in significant changes to degree plans and timing; please consult regularly with your Primary Academic Advisor (and others, as described below) to make sure your graduate plan remains on schedule.

Most graduate students discuss potential research topics with their future advisor(s) before they apply for admission, and these discussions should continue and intensify during your first year. A complete research plan will include the scope, logistics, funding, and intended products (thesis, reports, papers) of planned and potential research. These discussions should result in the student formalizing plans for research, including identification of a major advisor who will supervise the project(s). In the following sections, we describe additional requirements and milestones for the main degree types: Ph.D., M.S., and coursework M.S.

B. Initial Advising Session and Course Plans

Just before your first quarter, you will meet with your Primary Academic Advisor to create a Course Plan. This plan should include all of the graduate requirements discussed above (section A) in addition to any more specialized courses required by your background and research interests. This is a very good time to take a close look at your education to date and identify any gaps that should be filled. Useful questions to ask yourself and your advisor are: (1) Do you have at least as much grounding in the fundamentals of the field as a graduating senior in this department? (This is a particularly important question if your undergraduate degree was not in a geoscience field). (2) Do you have sufficient breadth to follow a well-presented departmental research seminar? (3) Do you have sufficient specialized knowledge to pursue your planned research?

Once you and your Primary Academic Advisor have constructed a plan, you and your Primary Academic Advisor will meet with the Faculty Graduate Advisor to review the plan. The purpose of this meeting is to ensure that you begin the first quarter with a realistic course plan that will help you meet your academic goals. Once a course plan is approved, these courses then become requirements to be completed prior to your qualifying exam or Masters degree completion. You may, of course, choose to take additional courses as your interests and expertise evolves. However, you may not omit any of the courses from your approved course plan without approval from the Faculty Graduate Advisor. Your course plan will be reviewed once a year while preparing your progress report. If there are significant changes in your research direction, that is a natural time to make any appropriate adjustments to the course plan, although mid-year adjustments are certainly possible.

C. Ph.D. Research, Reading Committee, and Dissertation Requirements

1. Oral Qualifying Examination and Advancement to Ph.D. Candidacy

In order to qualify for candidacy in any doctoral program of the Division of Graduate Studies at the University of California, a graduate student must pass a qualifying examination within three years of entering his/her Ph.D. Program. The normative time to take the Qualifying Exam in the UCSC Earth and Planetary Sciences Department is by the end of winter quarter of the third year for students entering with a Bachelors degree (second year if entering with a Masters degree). The Qualifying Exam is centered around a written dissertation proposal that defines the student's research goals, describes a plan for achieving these goals, and discusses pertinent literature.

Sometime during the first year (or possibly early in the second year) each Ph.D. student should choose a faculty member to chair the Qualifying Exam committee. In the EPS department, this person is generally the Primary Academic Advisor. University regulations require that the chair be a tenured professor at UCSC, so if your primary advisor is currently untenured, you and your advisor will need to select an additional faculty member to be the chair. Together the advisor and student select additional members of the examining committee. Most committees should be composed of three members from the Earth and Planetary Sciences faculty or affiliated faculty, and one outside member. The outside member may be a tenured professor from another UCSC department or from another institution in a field related to the Earth sciences. Any non-Academic Senate faculty member or professional from a non-academic institution (e.g., U.S. Geological Survey) must be approved by exception following submission of the proposed member's C.V. to the Dean of Graduate Studies. If additional committee members are desired, the balance of the committee (at least 50%) is generally EPS faculty.

The student coordinates a date and location for the exam that is acceptable to the entire committee. It is the student's responsibility to plan the exam sufficiently in advance so that the Faculty Graduate Advisor and Graduate Dean can approve it, **typically 30 days prior to the exam date**. The appropriate form to nominate members of the Qualifying Exam committee can be obtained at the department graduate coordinator's office (Jennifer Fish) or on the Graduate Division's website at http://graddiv.ucsc.edu/current-students/pdfs/qe_nom.pdf. Once completed, please return the form to Jennifer Fish and she will forward it to the Graduate Division.

The exam will be based on the dissertation research proposal, copies of which should be distributed to the committee members *at least two weeks in advance* of the Qualifying Exam. Some committee members may provide feedback and make requests for changes prior to the Qualifying Exam. The proposal presents one or more scientific problems to be addressed by the student and should also include a proposed timeline, specific project milestones, and a plan for funding. The proposed project should have breadth and depth appropriate for a Ph.D. dissertation. At the time of the Qualifying Exam, students are expected to have in-depth knowledge of fields and literature relevant to the proposal, so you should begin reading and discussing the literature as soon as possible. At the Qualifying Exam, the student generally makes a brief presentation to the committee and then answers questions related to the proposed research plan (its appropriateness, methods to be used, logic of the approach, etc.) and fields of study encompassed by it. Most Qualifying Exams in EPS last 2-3 hours.

The student is verbally notified of the results immediately after the exam. The committee chair prepares an official report to the Graduate Division; one copy goes to the student, one to the department, and one to

the Graduate Division accompanied by an approved Reading Committee Form and a \$90 direct deduction from the student's account to cover the processing fee for advancement to candidacy. The Qualifying Examination may be taken no more than twice, and if retaking the exam is necessary it should be done within no more than one quarter after the first attempt, and within less than 3 years of entry to the program. Exam committee membership cannot be changed between the first and second exams without specific permission of the Graduate Dean.

The Aaron and Elizabeth Waters Award is presented annually to the student(s) whose dissertation research proposal is judged best for that year by the faculty of the Earth and Planetary Sciences Department. In order to qualify for consideration for the Waters Award, **students with a Bachelors degree must have successfully passed their oral qualifying exam by the end of their 8th full-time equivalent quarter (excluding summers). Those with a Masters degree entering from another program are eligible through their 5th quarter.** All proposals must be on file in the department office by the first week in May to be considered for this award.

2. Ph.D. Dissertation Reading Committee

At the time of advancement to candidacy, students must submit a Reading Committee Form to the Graduate Division. This form lists the names of the faculty who will sign the original dissertation title page when it is complete. The Reading Committee consists of at least three individuals, the majority of whom must be members of the Santa Cruz Division of the Academic Senate (which, for EPS Department members, are ladder-rank faculty). The reading committee often includes some or all of the same people who administered the oral qualifying exam, but this is not required. The Faculty Graduate Advisor must approve and sign the Reading Committee Form. Once this form is submitted, membership can only be changed by submitting a revised Reading Committee Form for the Graduate Dean's approval. **The Reading Committee Form must be turned in with the qualifying exam report and the \$90 account deduction for the Advancement to Candidacy fee before "Advanced to Candidacy" status is official.**

Once advanced to candidacy, students are required to meet with their Reading Committee at least once each year. External members from other institutions that may find attendance difficult are not required to be present for these annual Reading Committee meetings, but getting regular input from the entire committee is often beneficial. The purpose of this meeting is to allow students and their committees to discuss preliminary research results, re-examine project goals, and verify that the student remains on track and on schedule. A funding plan for the remainder of the research project should also be discussed. The chair of the Reading Committee (the Primary Academic Advisor) is required to submit a written report concerning research progress to the Faculty Graduate Advisor in the spring; this report forms the basis for the annual department review of academic progress, which is submitted to the Graduate Division.

3. Dissertation: Completion and Defense

The Ph.D. dissertation is a scholarly contribution to knowledge, which embodies the results of original and creative effort by the student. The final evaluation is completed by the Reading Committee. The dissertation must be written explicitly in accordance with "Instructions for Theses and Dissertations" prescribed by the Graduate Division. It must be submitted within the normative time requirements for the Ph.D. degree. Students are urged to prepare their dissertations, or certain chapters in them, in a form that is suitable for publication. This places emphasis on succinctness and clarity, with much of the analytical and descriptive data placed in additional chapters or appendices.

Students must present a complete draft of their dissertation to their committee by the fourth week of the quarter in which they wish to graduate. Thus, a minimum of six weeks is allowed for faculty evaluation, revision, and a defense seminar, which must be scheduled and publicized at least two weeks in advance. This is a public departmental seminar, with additional questions asked by the dissertation committee in a separate session afterwards, followed by a celebration with the successful candidate.

D. M.S. Research, Reading Committee, and Thesis Requirements

Like Ph.D. students, M.S. students should work with their Primary Academic Advisor as soon as possible to develop a research plan. Once a preliminary plan is in place, each M.S. student should set up a research (reading) committee comprising the Primary Academic Advisor plus at least two additional members. One of these committee members may be from outside the department (typically having a professional rank equivalent to a faculty member), but the majority of committee members must be members of the Santa Cruz Division of the Academic Senate. M.S. students are required to submit a Reading Committee Form to the Graduate Division by the end of the second week of the quarter in which the degree is to be granted, indicating proposed membership of the committee. The committee will meet with the student at least once per year to discuss research plans and progress; a report on these topics must be submitted to the Faculty Graduate Advisor by the Primary Academic Advisor once per year. A complete M.S. thesis (meeting format requirements specified by the Graduate Division) should be submitted to the reading committee by early in the final quarter of work, generally spring of the second year in the department. There is no formal requirement that M.S. students "defend" their thesis research as part of a seminar open to the public.

E. Coursework M.S. degree

The coursework M.S. degree is a terminal professional degree, intended to allow students to increase their breadth, quantitative depth, or emphasis on a particular specialty; to provide the student with a stronger background toward competition for jobs or an enhancement of skills for current employment (e.g. K-12 teaching); or to allow students from other disciplines (e.g. biology, physics, chemistry, math, environmental studies) to acquire advanced training in Earth and planetary sciences. Transcripts are annotated with "Master of Science by Coursework," in contrast to the "Master of Science by Thesis." Students will be required to complete nine 5-unit courses, normally within three quarters, for this degree. Coursework M.S. students with work or other obligations may require a longer time to complete the nine courses. These courses should be at the graduate or upper-division undergraduate level. No more than 15 units may be upper-division undergraduate courses, and no more than 5 units may be independent

research or internships (EART 297 or 298). The department generally discourages coursework M.S. students from taking graduate seminars (EART290_) as part of the nine-course requirement.

Courses to be taken will be chosen on the basis of student's interests, in consultation with a Primary Academic Advisor, and with approval of the Faculty Graduate Advisor. Just before your first quarter, you will meet with your Primary Academic Advisor to create a Course Plan. Once you and your Primary Academic Advisor have constructed a plan, you and your Primary Academic Advisor will meet with the Faculty Graduate Advisor to review the plan. The purpose of this meeting is to ensure that you begin the first quarter with a realistic Course Plan that will help you meet your academic goals. Any revisions to the original course plan must be formally submitted and approved by the Primary Academic Advisor and the Faculty Graduate Advisor. Coursework M.S. students are required to fulfill one of the following capstone options: a substantial review/research manuscript, or a comprehensive oral examination based on their course work.

F. Annual Review of Academic Progress

Graduate students are evaluated annually to assess academic progress by completing an approved Progress Report form, and the results of these reports are forwarded to the Graduate Division near the end of spring quarter. This assessment is made primarily by the Primary Academic Advisor (in consultation with the Faculty Graduate Advisor and the student's reading committee, if the latter has been constituted) on the basis of coursework, research progress, and other factors. Graduate students in Earth and Planetary Sciences must demonstrate satisfactory progress to assure good academic standing. A student whose progress is considered to be unsatisfactory will be placed on academic probation. If you are placed on academic probation, you will receive a letter clearly stating the grounds for probation and the conditions for returning to good academic standing. If these conditions are not met, you will be dismissed from the program.

Please review the latest version of the UCSC Graduate Student Handbook for more information:
<http://graddiv.ucsc.edu/current-students/academic-regulations/graduate-student-handbook/index.html>.

IV. Computer, Administrative and Field Support Information

A. Computer Support

There are two sets of computer resources available to all students:

1. Planetary and Marine Computing (PMC) for department computers

The contact address for computer support is eshelp@acg.ucsc.edu.

The Planetary and Marine Computing web site at: <https://pmc.ucsc.edu/> has information about the kinds and levels of computing support offered locally for EPS department computer systems.

Department computers (often purchased by faculty and researchers using grants) are supported by the ACG. If you need an account on the department UNIX machines please request an account by emailing

eshelp@acg.ucsc.edu. In your request, please include your first name, last name, advisor's name, email address and a phone number where you can be reached (for communicating your account password).

2. Information Technology Services (ITS) for central UCSC computing resources

The contact address for ITS computer support is help@ucsc.edu. This includes email support for all @ucsc.edu addresses. All graduate students should have a computer account from Information Technology Services (ITS). This can be obtained by visiting the ITS Help Desk (Kerr Hall Rm. 54, M-F 8am to 5pm) or on-line at: http://its.ucsc.edu/support_center/. Please note that your ITS computer account/access is completely separate from that managed through the department. There are hardware and software resources available across campus through ITS, that you may access only after establishing an ITS account.

B. Administrative Support

The following resources are available in the main EPS Department front office (E&MS A232, A234):

Two copiers/scanners are located in Rm. A234 for teaching, research and personal use. For personal copying machines can be used in many different locations around campus as well and charged to your University accounts. Teaching Assistants use copy cards specific to each course, issued by the department's front office staff. The UCSC Copy Center can be used for color copies (ie maps) and Readers; see the department staff for funding information before emailing an order request to copy@ucsc.edu. Contact your faculty sponsor regarding research-related copying for them to contact ps_copiers@ucsc.edu to add you to their specific account number. Teaching labs in the Earth and Marine Sciences building are each equipped with a data projector. If you need other A/V equipment, you must check it out from the department office. The equipment can be reserved quarterly on an on-going basis or for occasional use on individual days. The sign-out sheet is located in Rm. A232. Most instructional rooms are equipped with Wifi, but you should verify that this is the case if it is needed.

Once you and your advisor have identified the keys that you will need one of you will need to fill out the Online Key Request Form at: <https://keys.adc.ucsc.edu>. All key requests must receive authorization from the key holder's supervisor and our department manager. You must respond to the email message link from ADCKey that is directed to the online key agreement. The key request will not move forward until you accept the key agreement. You will then be notified by email once keys are ready to be picked up (usually within two business days).

A mailbox is provided to you in Rm. A234. A FAX machine is also available in the department office (Rm. A232). Phones are in the front office and some of the graduate student offices. If you need to make long-distance calls, you will need a telephone access code, which you can get from your research advisor. Basic supplies are available in the front office for your use as a Teaching Assistant for classes. In general, office supplies for research purposes should be requested from your Primary Academic Advisor.

C. Instrument, Instructional and Field Technical Support

The department has three full-time staff who provide broad-based research and instructional support. This team is led by Instrument Engineer Dan Sampson, and includes Specialists Brandon Cheney and Eli Morris.

Brandon focuses on instructional equipment support, such as stereoscopes, Brunton compasses, microscopes, field instruments, departmental vehicles, etc., and can help arrange camping gear for field trips such as stoves, cookware, lanterns, etc.

Dan provides hardware research and instructional support, including equipment repair, design, and construction, and purchase of new equipment, and is also involved in most infrastructure modifications done in the building. He has experience with many analytical chemical methods (ICPMS, XRD, XRF, Electron Microprobe, etc.) and oversees most of these facilities in the department. He is also the lead for the support team and can help determine the appropriate contact for any particular issue.

Eli is responsible for software and computer-based instrument control issues. He also manages the cluster computing facilities for the Climate Research Group.

If you have an issue that fits into any one of these categories, or if you aren't sure if your issue is covered, email epstech@acg.ucsc.edu. This will generate a ticket that will be promptly addressed.

D. Department Vehicles

The department maintains three 12-passenger vans, one cargo van and one 4WD 5-passenger Toyota Tundra truck for field use. The vans can be reserved via email at epsfleet@gmail.com. The truck (AKA “Ruby”) is reserved through a self-assigned Google calendar system. The current schedule for the vehicles is posted at: <http://eps.ucsc.edu/about/fleet-vehicles.html>. Brandon Cheney is in charge of the vehicles and can be contacted regarding complications or maintenance issues or to learn the details of the truck reservation system.

E. Department Poster Printer

A poster printer is available in E&MS A170, as well as a Mac and a PC that can be used for poster printing or general use. Both a black & white and color printers are also available in that room as well as WiFi. To print a poster, you will need an account from eshelp@acg.ucsc.edu, if your advisor does not already have one for you to use (please ask them first). Printing is \$2 per linear foot and the printer can print up to 42 inches in width. Comprehensive instructions are online at: <https://wikis.pmc.ucsc.edu/pmc/GeneralHelp/PosterPrinting>. For poster printer trouble or questions, please email epstech@acg.ucsc.edu (not eshelp@acg.ucsc.edu).