

INTRODUCTION

VIII Graduate Student Handbooks

With a handbook as a reference, students are better able to use the resources available to them, and they have a framework around which to organize the graduate experience at Berkeley. The handbooks in this section were chosen for a selective overview because they reflect a variety of approaches to providing information to students.

The EECS Survival Notes were written by students for students. The topics stressed in the notes reflect an insider's view and are intended to give the reader a subjective, experiential perspective on the nature of graduate life and the Berkeley area.

The Mechanical Engineering Graduate Student Handbook was formulated out of meetings with graduate students. Note the flow chart outlining the continuing student registration process and the section entitled, "How do I Meet People?"

The Ph.D. Survival Manual from the Architecture Graduate Office, with rounds one through five, exemplifies a creative approach to capturing the phases of graduate study and outlining department and university requirements. The sample forms at the end of the handbook familiarize students with the paper process necessary for accomplishing certain steps in the degree program.

The Electrical Engineering and Computer Science Graduate Information Handbook is a comprehensive document. Note the sections describing resources for women and minority graduate students and the information on building security.

The Graduate Student Handbook for Forestry and Resource Management includes a wide range of information--both on formal requirements and on basic department facilities and extracurricular activities. Note section 8.6, Guiding Professors and Graduate Advisers--particularly the sections describing graduate advisers' and students' responsibilities--and section 8.10, Publication of Research.

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Graduate Student Handbook

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Graduate Division Resources

- Handbook for New Graduate Students.

Materials are available at 325 Sproul

THE 1001 EECS SURVIVAL NOTES

February 7, 1991

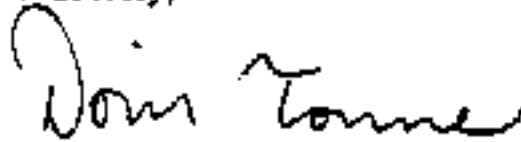
Dear Student:

Berkeley is a wonderful and exciting place to be a student, but it can be a bit daunting until you get settled in. The graduate student associations in EE and CS have created this document to ease your transition to life at Berkeley. The survival notes are written by students for students, and the opinions expressed are not official ones.

This guide says little about courses, research, or requirements. These topics are covered exhaustively in other documents that you have or will receive. Your fellow students are likely to be your best source of general information in these areas, though we tend to be a bit subjective in our judgements.

This is an evolving document, the work of many hands. I am deeply indebted to Diane Hernek and Ethan Miller from CS and Henry Chang, Bill Krause, Ken Nishimura, Henry Sheng and Susan Streisand from EE for their help in verifying and updating information for this year's edition. If you find that we've omitted or belabored anything, please let us know - your input for next year's edition is enthusiastically welcomed. And you may even be so lucky as to get the job of editor.

Sincerely,

A handwritten signature in cursive script that reads "Doris Tonne". The signature is written in dark ink and is positioned below the word "Sincerely,".

Doris Tonne, 1991 editor

1 Housing

We start with the most important thing of all: where you will hang your hat for at least the first semester. The first thing you should do is get yourself a good map of the East Bay, especially Berkeley.

Berkeley is divided loosely into several parts, including Northside, Southside, the Hills, the Flatlands, and the Marina district. You will primarily want to consider the first four for housing. The Marina district is basically an industrial area adjacent to Interstate 80. The Flatlands extend roughly from Martin Luther King Jr. Way westward to the Marina district. Southside and Northside are east of Martin Luther King Jr.; they are divided by the campus. The Flatlands are sometimes regarded as a higher-risk area to live in (auto insurance rates are substantially higher with some companies), although many students do live there happily and safely, and generally at lower cost than elsewhere in Berkeley. Try to stay to the north of Dwight Way in the Flatlands.

The eastern portion of Southside closest to campus consists largely of undergraduate dorms, fraternities, and sororities. University-owned housing fills very quickly, so it may be too late to apply. But students from outside the U.S. may still be able to obtain a room at International House, at the southeast corner of campus (2299 Piedmont Avenue, Berkeley, CA 94720, (415) 642-9470). It is clean, friendly, and close to campus (and that is saying a lot). Several of the first year students in the department stay there and most of them feel that it's a great place to start with. There is also a new dorm which opened in January 1991; the Foothills complex is at the northeast corner of campus, so it is very close to the EE and CS departments. This addition should ease the dorm crunch a little bit. A \$100 application fee is needed, so be prepared to shell it out when you apply. The fee is applied to your room and board, which ranges from \$2300 to \$3300 per semester. There are single and double rooms; to save money, in general, half of a double is less expensive than a single. It is possible for graduate students from within the US to get a place there too, though they get a lower preference. If you apply $\frac{1}{2}$ year early, you'll get in. The rest of Southside is housing of varying quality. Some is "student ghetto" housing; some is located in nice residential neighborhoods. Many students do live farther south of Berkeley, in Oakland and Piedmont, or north of Berkeley in Al-

bany, El Cerrito and Richmond. Often, they must use transit facilities or bicycles to get to campus (see Transportation).

Northside is hillier than the relatively flat Southside. Northside consists of private residences intermixed with apartment complexes and houses divided up into flats: as one progresses northward, the proportion of private residences increases. There are very few apartment buildings north of Rose Street. The Hills are even hillier than Northside; living there generally requires a car for shopping, although commuting to campus can be done from some locations by bicycle and bus.

Rent can run anywhere from \$250 a month for unheated basements to well over \$1000 for palatial space and more than two bedrooms. The following estimates are necessarily rough. Prices vary widely because of rent control, and places may be cheaper if obtained by word-of-mouth rather than public advertisements. An unscientific survey indicates that you might expect to pay about \$350 for a studio apartment, \$450 for a one-bedroom apartment, \$650 for a two-bedroom apartment; for a shared house or apartment, \$200 to \$450 per occupant, assuming private bedrooms. Furnished accommodations are available at a slight premium, and the furnishings are usually tacky. If you don't share a place, be prepared to pay more than you would for a comparable shared space -- i.e., a shared two-bedroom will usually be cheaper than a private studio or one-bedroom. Oakland, Albany, El Cerrito, and Emeryville offer housing which is sometimes cheaper but usually easier to find: since they are farther away, though, you may have to commute.

The University operates about a thousand apartments for married students and students who are parents. The rents for these range from \$265-\$450. Most of the apartments are in an area near the bay (Albany village) a couple of miles northwest of campus (10 minutes by car if you can find a place to park, 25 minutes by bicycle). There is public transportation to the campus from these apartments. The remaining apartments are within walking distance of the campus, but are hard (translation: impossible) to get. Most of the apartments have two bedrooms: these have the shortest waiting period but only parents are considered for these. There are also some one and three bedroom apartments. Waiting lists are generally long. Expect a 2 month to 2 yr. waiting period, depending on the type of apartment. Students can apply before they arrive in Berkeley and can thus

shorten their waiting time. For more information and applications, contact the Family Housing Advisor, 2401 Bowditch Street, Univ. of California, Berkeley, CA 94720, telephone (415)642-4109.

1.1 Finding Housing

The EECS department has been helping graduate students find housing during the past few years. It might be possible for you to find a place through Genevieve Thiebaut (215 Cory, 642-3694, thiebaut@janss.berkeley.edu) who started and currently controls the housing effort. Since the probability of finding housing depends on the availability, not all incoming students may be able to find housing in this manner in the fall. However, there are openings all through the year and you might find this useful in moving to better living quarters at a later date.

The Community Housing Office at 2401 Bowditch Street, (415) 642-3642, has listings for houses and apartments to rent or to share. The Housing Office will want to see your registration card or letter of admission before letting you see their listings. They also have a file of people looking for places to live, but we've never seen anyone look through it. You can write or call the housing office to have them send you general information on housing, a map, and/or specific information on leases, utility service, etc. New listings are posted before the office opens at 8:30 in the morning, and frequently the best accommodations are gone within the hour. If you want to live with another person or people, you must either rent a house or apartment and then look for roommates, or look for people who are trying to find roommates; listings for both purposes are maintained by the housing office.

Several commercial services provide listings, and they are definitely worth looking into. For example, The Berkeley Connection (2840 College Avenue, (415)343-7821) charges a fixed fee of \$30 for access to their rental listings for two months. The charges for access to shared housing listings is \$25 for two months. Both services are available for \$60 for two months. They have an additional phone-in service that lets you get the information you need over the phone for a flat charge of \$5 over the basic service rate that you use. Homefinders (2158 University Ave, (415) 549-6450), has a similar deal. They charge \$65 for rental listings, \$10 for shared housing listings, and \$65 for both. Their phone-in service is free, except for shared

listings, for which it's \$5 extra. If you use a computerized listing service, you should elect the widest possible choice of accommodations, so you get to see all the listings. (Don't let the computer weed out things in which you might be interested.)

While you are looking for housing, you will need a place to stay. Hotels and motels are relatively expensive, at least \$40 per night. Over the summer, the University rents out rooms in some dormitories through the University Guest Residence Program, operated by Conference Services. The cost is \$22 per person for a double room, or \$34 for a single. The rooms are available approximately June 1 through August 13, at which point they revert to dormitory service. You can make a reservation and get details about these accommodations by calling Residence Hall Summer Housing at (415) 642-5796. Note that some of these rooms are taken well in advance (some dates are already booked up in February). If you will be arriving after 6:00 PM, you must make arrangements in advance or you will not be able to get into the building to register.

If you rent an apartment, you may end up with either a month-to-month tenancy or a one-year lease; in either case, be prepared to give the landlord as much as three times the monthly rent before you can move in: the first and last month's rent plus a one-month security deposit refundable with interest. The state of California and the city of Berkeley have laws which provide much protection for tenants. (Berkeley has the dubious distinction of having rent controlled housing.) Among other things, these laws specify that tenants may not be evicted without proper cause and that rents on apartments can be raised only once a year. The U.C. Housing office can provide more information about your rights. Also, if needed, you can consult with the Renters' Assistance Project of the Associated Students of UC (ASUC), located in Eschelman Hall.

You will generally need to pay a deposit to Pacific Gas and Electric; they usually ask for \$110, as the deposit is supposed to equal two months' average service. If this seems too much, complain to PG&E, mentioning that you are a poor starving student, and they may lower the deposit to \$90 or less. The phone company, too, may demand a deposit, plus payment of installation charges in advance; this can come to as much as \$80.

If you found all this discouraging, now the bad news: be prepared to search for at least a week or two. Official estimates of the vacancy rate in

Berkeley vary between 1% and 3%, but in reality it is less than 1%, due to seasonal variation — this is officially called a "housing crisis". That is a mild term, indeed, for what things are really like. *Get here early, if possible before August (for Fall enrolls) or January (for the Spring term), in an attempt to avoid the rush.* Don't expect to be able to find a place to live over the phone. You will probably have to be willing to spend 1 to 3 boring, frustrating weeks (the average is 2) looking for a place. After two weeks of checking out the day's new listings at the Housing Office at 8:30 and the Berkeley Connection at 3 and finding that someone has beaten you to each tempting abode, you get into a "What am I doing? I don't want to live here, anyway" mood. Keep two things in mind when all this is running through your head: First, you can always move if you don't find the ideal place. Just about everyone does at some point during their stay in Berkeley. Second, like every one of us, you will eventually find housing more or less to your satisfaction, though it may not be in Berkeley.

2 Doing Business with the University

Berkeley is a large university, and you will in your year(s) here come in contact with a number of administrative offices, secretaries, and, if you're lucky, even a professor or another student or two. The secretaries and administrators in our department, the Department of Electrical Engineering and Computer Sciences, and in the Computer Science Division (note the creeping administrative complexity), are generally helpful, friendly, and well worth knowing.

The EECS Graduate Office is located in 211 Cory, and is the central focus for most academic administrative matters. Genevieve Thiebaut and Heather Hatakeyama deal with current students, and maintain EECS current graduate student records. Kathryn Crabtree (the High Priestess and Den Mother) handles current student records in the Computer Science Division. Sheila Humphreys, academic coordinator for student affairs, is the person to see regarding affirmative action and for information on available financial support (especially regarding fellowship opportunities for affirmative action students and women). She is involved in recruitment and serves as a liaison to several student organizations and as a student ad-

visor/advocate for academic matters. Pearl Tranter coordinates fellowships; and Genevieve Thiebaut is the supervisor for grad student matters and the admissions process. If you have problems with admission (or re-admission, if you were previously enrolled at a UC campus), you should see Rui Neves (if your family name begins A to Lee), or Patrick Herman (for names Lef to Z). General admissions information is available at (415) 642-3068. Pati Ciprazo (CS) and Carol Erickson (EE) manage teaching-assistant and room assignments. The Computer Science division office handles mail, key distribution and access to photocopiers for students with offices in Evans Hall.

Most research assistants, known to the bureaucracy as Graduate Student Researchers or GSRs, work for the Electronics Research Laboratory (ERL) in 253M Cory. ERL administers research, while EECS is responsible for teaching; each has its own director and staff. Shirley Price handles GSR employment records and paychecks. If you will be starting as an GSR and have not completed your paperwork by mail, you should see Shirley immediately upon your arrival. *Delays in filing the necessary forms will delay your first paycheck.*

The next level of administration is the Graduate Division (located in Sproul Hall); you may occasionally have contact with these offices. The Berkeley campus-wide administration is also housed in Sproul Hall. Fellowship checks are delivered in Sproul. Picking up checks is only one of several occasions you will find to stand in line in that building.

2.1 Support

If you were offered a full year position as a Teaching Assistant (TA or GSI) in your admissions offer, you will be assigned some office space before classes begin. If you have not yet been given a specific teaching assignment, you should check with Pati Ciprazo (CS) or Carol Erickson (EE), and talk to the professors for the classes you might want to teach. Fall teaching assignments are usually not made until late in the summer, and are very flexible until (almost) the day classes start. These full-year GSIs are entitled to receive a check for moving expenses, which may be as much as \$440, depending on the distance moved. This includes moves from outside the U.S. Payment of this money is not automatic; to get it, you must ask in 211 Cory Hall. The money comes in only after the first year has elapsed. Josephine Lee handles

are not claimed as a dependent on your parents' income tax, among other things. The Department is investigating ways of alleviating this burden. (Students who are not citizens or permanent residents of the U.S. cannot become California residents, except for a few visa categories. Information is available from the residence office in 120 Sprout Hall [(415) 642-1614].) In any case, here are some of the things you should do to prove your good intentions:

1. Register to vote in California.
2. Get a California Driver's License or Identification card.
3. Register your car in California.
4. Open a local checking account and save cancelled checks.
5. Keep all of your rent receipts.
6. File a California State Income tax form, even if you have nothing to report. In your first year, it will be form 540NR; thereafter, form 540. Note that California offers a \$60 tax rebate to all individuals who have lived in rented housing in the state for at least six months of the tax year. You may be entitled to this rebate even if you paid no state income tax!
7. Whenever you fill out a University form that asks for your "permanent address," use your Berkeley address.

All of the above except item number 3 should be done *immediately* after you find a place to live — these tasks are quite painless, but have a way of being forgotten once classes have begun. Item 3, re-registering your car, may involve changes in your insurance and it may be advantageous to defer this, especially if the car is registered in your parents' name. Note that the state in which you have your driver's license has nothing to do with the state in which your car insurance or registration exists. A photographic California Driver's License or State Identification Card is invaluable for check cashing and other miscellany; it is universally accepted (and demanded) as the primary form of identification here. Either card can be obtained at the Dept. of Motor Vehicles offices in Oakland (on Claremont Avenue) or El Cerrito (off of San Pablo). You may telephone for an appointment, but be warned that the lines are often busy.

3 Banks, Checks, and Cash

Berkeley is blessed (possibly damned) with a huge number of banks — most of the major California banks have at least one office within a few blocks of the campus. If you already have an account with one of them, you will be able to continue using it, although you will need an account at a local branch (as well as a California Driver's license or State Identification Card) to negotiate checks in many stores.

In addition to the large commercial banks (Bank of America, Citibank, First Interstate, Security Pacific, Wells Fargo), Berkeley has a number of smaller banks and savings and loans (American, Great Western, Home Savings, Home Federal, Homestead, San Francisco Federal, Union) that offer checking accounts. There is also a state employees' credit union which you can join if you are a teaching assistant or research assistant. The banks and S&L's vary quite a bit — a bunch of phone calls will pay off here. There are several things to keep in mind when you're shopping. These include the policy regarding placing holds on deposits, ID required to open a checking account, location of automatic tellers (Wells Fargo and Bank of America have several on Southside, and most of the others have some downtown), and automatic teller networks. Most California banks are on the STAR system, and some are on the nationwide Cirrus and PLUS systems. Banks will usually charge \$.75 to \$1 for an ATM transaction at a machine that isn't theirs. You can also use many ATM cards at local stores (supermarket, bookstores) to pay for your purchases. One more thing: you might want to consider the investment policies and politics of a bank before opening an account. Be forewarned: a large number of people have complained about the Bank of America for many different reasons.

If you don't already have a credit card, you should consider getting one. Bank of America, Wells Fargo, Citibank, and others offer student credit cards: you can apply (and will probably receive one) even if you don't have your checking account at that bank. Students can also get an American Express card, but it's far more expensive (\$55 annual fee vs. \$15-25) and accepted at fewer places. However, American Express has been offering cheap plane tickets, so it may be worth it if you have family a long plane flight away.

Out-of-area checks are not accepted by grocery stores and local merchants. You should expect a

7-day working "hold" to be placed on any out-of-state check that you deposit in your bank account (see above). To get around this problem when you arrive, come equipped with at least \$500 in traveler's checks, and the remainder of the funds you wish to deposit in the form of a certified or cashier's check, which you can usually (but not always) convince the banks to make available immediately. If you stay in the UC dormitory, they should take out-of-state checks for payment of room rent; you should also be able to use an out-of-state check for your apartment deposit and first and last months' rent.

4 The Area

The San Francisco Bay Area is without question one of the best places in the United States to be a student. There are many, many things you can do when you should be studying.

4.1 Geography of the Bay Area

Berkeley is on the east side ("Eastbay") of San Francisco Bay ("The Bay"), north of and adjacent to the city of Oakland. San Francisco is about 7 miles (12 km) across the Bay. The Bay Bridge connects Oakland with San Francisco. San Francisco ("The City", or "SF", but NOT "Prisco") lies on the northern end of the San Francisco Peninsula. The Peninsula stretches 40 miles (65 km) south to Palo Alto and San Jose ("Silicon Valley"). North of San Francisco, across the Golden Gate Bridge, is Marin County. North of Berkeley are the cities of El Cerrito, Albany, and Richmond, and to the east, on the other side of the Berkeley Hills, are Orinda, Lafayette, Walnut Creek and Concord.

4.2 Climate

Wonderful! Berkeley is close enough to the sea to benefit from its climate stabilization, but far enough inland to avoid some of the dank fogs that hang over SF during the summer months. Fall is probably the best season, with little fog and moderate to warm temperatures. August and September are the warmest months. In winter the temperature rarely, if ever, gets below freezing, but it can be cold (5-15C/45-55F). The winter rains (mostly just a drizzle) start sometime in late November, and last through March. The normal seasonal rainfall is roughly 30 inches, but for the last few years, we've been in a severe drought.

The rains generally cease in spring, and it gets warmer, with shorts weather beginning in early May. The summer brings fogs that generally dissipate by mid-morning. If you go to the other side of the Berkeley Hills or down to the San Jose area in the summer, the temperatures can be in the 40C/100F range, but rarely exceed 30C/90F in Berkeley proper. No matter what time of year, the evenings are always cool and you will find you will have to carry a sweater or light jacket. If you were looking for a suntan, you probably should have gone to UCLA.

4.3 Things to do

Berkeley is well endowed with diversions, including dozens of cinemas and theaters, all kinds of musical events, coffeehouses, bookstores, and so on. If you get tired of Berkeley, San Francisco is only a short bus or BART ride away; it has all the things one would expect in a major city, including a symphony, opera, museums, galleries, ethnic neighborhoods, good restaurants, etc. Many say it is the most beautiful city in the U.S., and you should not ignore it during your stay here.

There are also many natural diversions in the immediate area and farther out. Berkeley itself has a rose garden and many vest-pocket parks scattered through the city. Just east of Berkeley and Oakland are numerous good-sized parks run by the East Bay Regional Parks District. They are ideal for picnics, day hikes, and bicycling trips. San Francisco has Golden Gate Park and a wonderful rugged, rocky coastline. Marin County has many beautiful natural areas, such as Golden Gate National Recreation Area, Muir Woods, and Point Reyes National Seashore. Farther north are magnificent redwood forests along the coast, the Napa Valley wine country, and the "Gold Country" along highway 99. To the south, there are many parks in the Santa Cruz mountains, and beautiful rugged coastline along Highway 1. Farther away are the Sierra Nevada, Lake Tahoe, Yosemite National Park, and many other park and wilderness areas. River rafting, skiing, and backpacking are all very popular. And we've only mentioned the most obvious places...

Restaurants abound in the Bay Area, especially in SF (which, by recent figures, has the largest per-capita restaurant density of major cities in North America, surpassing New York). Innumerable small ethnic and fast-food places adorn the north and south ends of the Berkeley campus; some of

them are very good and most are cheap. The greater Berkeley area sports many more. 'Northside' — located near the corner of Hearst and Euclid just off campus — is by far the most common lunch hangout for EE and CS students, offering everything from gourmet hot dogs (at the infamous Top Dog) to sushi.

Among "fancy" restaurants, one stands out: Chez Panisse on Shattuck, parent of the Fourth Street and home of the "California Cuisine". This is a place to take your parents or your friends on expense accounts: expect a three-digit bill and reserve well in advance.

5 Transportation

Disclaimer: although a reasonable attempt has been made at making this an accurate statement, not all of the routes, fares or connections in this section have actually been traveled by anyone we know.

Like all of California, the Bay Area comes equipped with a marvelous system of freeways that can whisk you to SF, Sausalito, Silicon Valley, Lake Tahoe and even (God forbid) Los Angeles. Unfortunately, to use them you need a car (or motorcycle). Fortunately, public transportation in the area is adequate, and many students get along quite well without cars.

Since the October 1989 earthquake, however, driving in the Bay Area has become a bit more complicated. The "Cypress structure", a section of 880 (which connects to the Oakland Airport and the Oakland Coliseum) no longer exists, and the detours, although easy to follow, make things a bit slower during rush hour, which is already slow.

5.1 Mass Transit

BART (the Bay Area Rapid Transit system, info: 465-BART) is our computer-controlled "marvel" heavy rail transit system. BART interconnects almost all the central business districts of the Eastbay and SF, but unfortunately does not serve the Peninsula (e.g. SF Airport and Stanford). Fares are reasonable (\$1.80 from Berkeley to SF one-way) and it is quiet, efficient and comfortable. You may take your bike on BART except during "commute hours", which are defined as 6:30 – 9:00 AM and 3:30 – 6:30 PM. (You'll need to get a special pass — available at any station).

The AC Transit (Alameda-Contra Costa Transit, info: 839-2882) bus system serves the Eastbay

with connections to SF. Amazingly, the busses are usually on time (you can get a schedule) unless delayed by traffic or mechanical trouble. Feeder routes run directly to all sides of the UC campus during rush hours and cost \$1.00. The network allows you to get to within two blocks of almost anywhere in the Eastbay. When paying the fare you can obtain a transfer good for an unlimited number of rides within three hours or so. Transfers are only available when you first board the bus, so take one whenever you think you *might* want an additional ride. Transfers are also available when leaving BART, but you must pay \$.50 when you board a bus. Monthly passes are also available for around \$30 from the BASS outlet at the ASUC.

AC Transit also has several routes to the Transbay Terminal in SF. It costs \$1.25 to go to SF and \$2.00 for the return trip. AC Transit's Transbay busses are identified by letters (e.g. F). Eastbay-only bus designations contain numerals (e.g. 43 or 51M). At the Transbay terminal in SF, you can connect with the three independent systems that serve the counties of San Francisco, Marin and San Mateo. The "F" bus can be caught all along Shattuck Avenue every 15 minutes or so and goes to SF.

San Francisco features a gamut of public transportation services: BART, old electric streetcars, new "Muni Metro" underground streetcars, electric busses, diesel busses and (on the hills) the famous cable cars. This motley but convenient collection is under the management of the San Francisco Municipal Railway or "Muni" (info: 673-6864). Busses cost \$.75.

The Golden Gate Transit (GGT) bus system serves Marin County (that's on the north side of the Golden Gate Bridge). It is primarily useful for going sightseeing or hiking in SF's backdoor wilderness, the Golden Gate National Recreation Area. The SAMTRANS (San Mateo Transit, info: 872-6748) bus system connects the Transbay Terminal to points south of SF. One can get to SF Airport for \$1.00 in about 50 minutes or to Stanford in about 1-1/2 hours for about \$1.50. There are also ferries that run between SF and Marin, the busses of County Transit in San Jose and the trains of Southern Pacific Railroad that runs commuter service between SF and the Peninsula.

Caveat: All public bus systems require exact change, so be prepared. BART stations have change machines for bills up to \$5. Always be on the lookout for free transfers: they crop up in more places than one might expect.

Maps and schedules of the common local bus transit routes are available in the Student Union on campus. BART has general area maps showing how to make some basic connections to the bus systems. There is the "Regional Transit Connection" and the ever popular "Fun Goes Farther on BART". Also look in bookstores or similar places for a "Regional Transit Guide" that sells for \$2. An AC Transit "Basic Route Map" will be sent to you by mail if you call the info number, 839-2882. AC Transit route maps and schedules are available on board busses or can be sent to you by mail if you call the info number. There are also transit maps in the front of the yellow pages in the phone book.

5.2 University Transportation

The Associated Students of the University of California (ASUC) and AC Transit (or maybe BART) jointly run a campus shuttle bus called informally, of all things, "Humphrey Go-Bart". These mini-busses leave for downtown Berkeley every seven minutes (during the day) from in front of Evans Hall, where Computer Science is located. They end up near the Berkeley BART station. The stop is right in front of the Bank of America at Shattuck and Center. The trip costs \$.25. Downtown Berkeley is also a major node in the AC Transit bus system. Eastbound buses to the Lawrence Berkeley Laboratory (a University-affiliated research center) and Lawrence Hall of Science leave from the front of Cory Hall.

The University Library also runs a jitney bus two times a day to Stanford University for library patrons who possess a library card (\$2.75 each way). Check at the main library desk for schedules. It is necessary to reserve space in advance. A Stanford library card is easy to obtain: go to the Services Desk in the Doe Library (also called Main Library) and ask for a Stanford Library card. It takes a day for the card to be ready.

5.3 Getting to Berkeley

Coming to UC Berkeley by car is extremely easy. When you arrive in the Bay Area, make your way to I-80. Take the University Avenue exit to campus. Proceed all the way up University (heading east) and when it ends you are here. Getting here by public transport is slightly more complex.

5.3.1 Airlines

There are three major airports in the Bay Area. Avoid San Jose since it is very far (60 miles, 100 km) and does not have a good connection to Berkeley. San Francisco (SFO) is on the Peninsula about 9 miles south of downtown SF and about 35 minutes to an hour by car from Berkeley depending on traffic. The Oakland Airport is 6 miles (10 km) south of Downtown Oakland and is about 20 minutes by car from Berkeley. It is also much easier to get to Oakland than SFO. If you tell your travel agent that you want to go to the Bay Area (or even Berkeley) they will most likely send you to SFO. All other considerations being equal (like money or connections), Oakland is the better bet.

You can get from SFO to Berkeley in several ways. Here is a list of some suggestions in order of preference:

1. Call a friend with a car.
2. Take the Berkeley Airport Connection (info and reservations: 841-0150), which runs every hour and delivers you to one of four hotels in Berkeley. The Hotel Durant is the closest to campus. It costs \$13 (or \$28 to go to a specific address) and you probably need reservations. You should be able to get it outside the baggage claim area for all airlines. There are other limo services, but some of them cost several times as much.
3. Take an Airporter bus for \$6 (info: 673-2432). This takes you Taylor and Ellis in SF. It is about a 2-4 block walk to a BART station. The busses run every 15 minutes from about 5:30 AM to 10 PM, and service does not end until 1:50 AM. BART service, however, ends at midnight.
4. Take the SAMTRANS bus #7B or #7F to the Transbay Terminal and switch to the F bus (for \$2.00) to downtown Berkeley. This costs \$1.00 and leaves at 15 and 45 minutes past the hour. Warning: SAMTRANS prohibits "excessive baggage" on its busses. If you're traveling with any luggage, you may not be permitted to board the bus.
5. Take a SAMTRANS bus to the Daly City BART station and then take BART to Berkeley.
6. Rent a car from a major rental company for \$30+ a day and drop it off in Berkeley or Oakland.

7. Take a taxi—the flat rate to Berkeley is between \$40 and \$50.

Since Oakland is much closer, the priorities are quite different:

1. Call a friend.
2. Catch a BART shuttle bus to the Oakland Coliseum BART station. This costs \$1.00. It costs another \$1.15 to get to Berkeley on BART. Remember that BART service ends at midnight.
3. Take a taxi for \$23 to \$25.
4. Take an AC Transit bus to the BART station. From there, either take BART or transfer to another AC Transit bus. This is cheapest way to go, but luggage is a problem.

5.3.2 Train and Bus

There are Amtrak stations in both Richmond (a few miles north of Berkeley) and Oakland. Your best bet is to get off at Richmond and get on BART. The Richmond station is very close to BART and is much safer than the Oakland Station, which is located in a high-crime neighborhood. If you require baggage handling service, you will have to go to Oakland and take a taxi to Berkeley.

Greyhound has terminals in the seedy districts of Oakland and SF. There is no stop in Berkeley. You can take an AC Transit bus from the Oakland depot or walk two blocks and get on BART. The SF terminal is right around the corner from a BART station.

5.4 Getting Around Berkeley

Most students live within a few kilometers or so of campus and rarely need a car. Finding parking near campus for commuters is next to impossible if you come after 7:30 AM. You can usually find a spot in the middle of the day within a 10 minute walk of Cory Hall provided that you drive around for 5 to 10 minutes. To purchase a parking permit, you must prove that you live more than 2 miles from campus and pay a \$30 transportation fee. Then you can either purchase a \$6 permit and then pay \$3 per entry, or you can pay a \$44 per month flat rate. Note that student fee-lot stickers permit the use of faculty lots after 5pm. Parking fines are incredibly easy to come by and cost \$14–\$24.

New parking restrictions for the areas immediately surrounding campus were enacted in fall

1989. Other than the few metered spots, these areas are limited to 2 hour parking unless you have a resident sticker proving that you live in that particular zone.

If you live a fair distance from campus or a food store, a bicycle is a good bet. Protect your investment by carrying a Kryptonite-like lock since Berkeley is a mecca for bike thieves and protect your brain by wearing a helmet. You should navigate to and from campus by a judicious choice of side roads since cars and particularly busses are notoriously rude; the side roads are quiet and pleasant, but some have lots of potholes. Many of Berkeley's side roads are partly blocked to cars by traffic diverters. Several roads have bike lanes. But you are not allowed to ride your bike on campus.

Some people prefer to commute on a motorcycle or moped. There are lots of places to park motorcycles and, unlike bicycles, they seem to be respected somewhat by local motorists. The climate, terrain, and distances here make the motorcycle an attractive form of transport. During the rainy season in winter it can be quite soggy. Mopeds may not have enough power to get up some of the Berkeley hills. To park a moped in campus lots, you need a permit.

Contrary to what you may have gathered while reading this, many students walk. To reduce the time you spend walking, when you choose a place to live (if you have a choice), choose it near a grocery store, near a bus stop and a BART station.

6 Health Services and Insurance

Most colleges and Universities offer some form of medical care to their students. At Berkeley, the Student Health Service provides access to doctors, dentists, and a fair array of laboratory and other services. What cannot be handled by SHS is referred to doctors and hospitals in the area. SHS is located in Cowell Hospital, a small, on-campus facility. They have outpatient care, and inpatient care for noncritical illnesses and injuries. It is generally the first place to go when medical attention is required. Cowell also has a dental clinic; the dentists practice privately in the local community as well as working in the Student Health Service on a rotating basis.

As always with Student Health, there is some debate over the quality of the care provided. Most

people do not have problems, some people do. Since this is true of medicine and dentistry in general, it is hard to say whether the care is any different from what one receives elsewhere.

6.1 Medical Insurance

As of Spring 88, all graduate students at UCB are required to purchase a mandatory health insurance plan. As with most health insurance, the cost of the Graduate Student Health Insurance Plan (GSHIP) is on the rise. For the fall semester 1990, the cost was \$135; the cost for spring is a little higher because it covers the summer months as well. But, beginning in 1990, the university will pay this fee for research and teaching assistants. It is possible to get exemption from this plan if you can show comparable existing coverage. In case of specific questions you can call the GSHIP information line at 643-7474 weekdays from 8 to 5.

The SHS acts as the "gatekeeper", providing primary care and referring students to outside specialists when necessary.

7 A Note for the International Student

If you will be coming to Berkeley from outside of the United States, you probably have some additional things to take care of.

7.1 Getting your Visa

Getting your visa is something that needs to be done. The process is slightly long and best started early. The normal flow of events should be something like this: The AFSS (Advisers to the Foreign Students and Scholars Office, International House, Berkeley, CA 94720, 415-642-2818), will be sending you a form to verify that you have enough money to support yourself for the first year. This is the Confirmation of Financial Resources Form (CFR). (If you haven't got it by now, write to them with a copy of your admission offer). The department has nothing to do with your visa and I-20 and won't be able to help you in this regard. You need to show about \$16,000 for the first year. The AFSS is not aware of any support offer made to you by the department (typical of Berkeley bureaucracy, the left hand doesn't know what the right hand is doing, and generally doesn't want to). Attach a copy of the support letters when you fill out this form. The deficit between your support and the \$16,000 needed is to be completed by showing

them personal funds or sponsorships from wealthy relatives at home or abroad. (Usually a statement to this effect from your sponsor and a bank statement of the sponsor is enough.) The AFSS will ponder over your CFR for some time and then mail you an I-20 (for an F-1 visa) or an IAP-66 (for a J-1). So far so good. Armed with an I-20 (or IAP-66) and the documents for financial support for your first year visit your friendly(!) US Embassy. Usually a short interview gets you your visa; the process at the Embassy takes only a day. In case of any problems, it would be appropriate (and efficient) to contact the AFSS, rather than the department.

7.2 Initial Finances

The initial period may seem to be rather expensive to you especially if you come from a country with a currency not as high as the dollar. Don't count on being paid before October if you are a TA or an RA. However don't despair, if you are employed by the department, it is trivially easy for you to get a loan from Sproul Hall to pay fees (contact AFSS). Bring enough to last you a month and some initial expenses. (\$1500-\$2000 would be a reasonable figure). Get your money in travelers checks. International checks will take forever to come through. Most bank drafts are convenient too, but all in all travelers checks are a better bet.

7.3 Some Health Care Advice

You will be covered by the mandatory GSHIP (look up the section on Health Services and Insurance). It covers most aspects of your health care except dental and eye care. It would definitely be cheaper to get a complete dental and eye checkup in your home country before you come here. Also, in case you use corrective eye glasses or lenses, it may be a good idea to get a spare set.

8 The EECS Department

Electrical Engineering and Computer Science, formerly separate departments, merged in 1973, though some distinction remains. This is partly geographical (most EE students and faculty have offices in Cory Hall, whereas CS personnel are based in Evans Hall, with a few grad students in the basement of Campbell) and partly academic (the two areas have different degree requirements). CS students and faculty retain academic autonomy

within the Computer Science Division, an academic subunit of the department with its own associate head. There is no "EE Division." At present, the department has about 500 graduate students, with some 35% of these in the CS Division.

The unified EECS structure fosters some major research efforts across the division boundary, such as those in computer-aided design, integrated circuits, computer communications and robotics. You may find valuable opportunities or expertise in the "other part" of the department from the one that defines your degree — don't be misled by the geographical separation. Advertised seminars are a good opportunity to learn about research activities throughout the department.

8.1 Office Space

Having an office means fuller participation in the community: interesting technical discussions in the halls, suggestions on where to eat lunch, and other fringe benefits. Unfortunately the department lacks enough space to provide every student with office space. First-year students in CS share a rather large office in Davis Hall (between Evans and Cory) with the CS TA's. Although it's pretty ugly and sometimes a bit loud, it's a great way to quickly get to know the other new students and provides access to terminals and phones. Teaching assistants in EE usually receive at least a temporary office, and many professors provide offices for their research students. This is further incentive for becoming actively involved in research.

8.2 Department-wide Computer Network

The computing environment at Berkeley is excellent. There is no dearth of computing resources (though you may have trouble simulating the Big Bang without some specialized hardware), with many large VAXen (11/785s, 750s, 8600s) and literally hundreds of workstations (Sun 3, SparcStation, uVAX, DECstation3100, etc.), all interconnected by a central high-speed ethernet. Most of these computers are associated with specific research efforts, and their number is growing steadily. Besides their research functions, these machines — each of which has its own community of users — provide a network-wide bulletin board service and person-to-person or person-to-group mail service.

The impact of this network is remarkable. All EECS faculty and all graduate students have accounts on one or more of the machines. The resulting ease of communication helps people stay in touch, exchange text and research results, arrange meetings, get answers to questions, and announce events, seminars and parties. Users who otherwise have little need for computers often obtain accounts just to read announcements and mail. Electronic mail is almost always the quickest and most reliable way to communicate with faculty, staff, and students.

8.3 Classes, Seminars and Research

You will be assigned a Major Field Advisor from the faculty who is supposed to help you decide on your course of studies. Advisors vary in their devotion to this task: some give advice but some just sign forms. Becoming familiar with the department requirements and course descriptions before you meet with your advisor will make your sessions much more productive for both of you. In particular, be prepared for a stream of three digit numbers to be flung at you by anyone discussing courses.

The primary source of academic information in the department is the document *EECS Graduate Information*, available, like many other department publications, at the Purchasing Office, 299 Cory. A copy will be mailed to all incoming grad students before the start of the school year. This covers degree requirements, areas of research, and some course information. Other students are eager to give advice as well. We are, of course, biased, but worth listening to. Up to date course and seminar information and announcements are posted on the second floor of Cory Hall and on the fifth floor of Evans Hall.

Weekly seminars are offered in the various topical areas within the department. These feature speakers from outside the university, or advanced students presenting results from their research. You can enroll officially and receive a token amount of academic credit, or just informally attend the ones that interest you. These seminars are a rich academic resource, especially for first-year students: they can show you what sort of research is going on, and give you ideas for your own work.

Research is the lifeblood of the department. Beginning graduate students are usually most concerned with course work; still, a little research early on — even if not a formal thesis project —

can pay rich dividends. Any research can lead to a thesis, or give you a better feel for the area; it will also put you into closer contact with the faculty and their resources.

UC-Berkeley's reputation for excellence in academics is not limited to electrical engineering and computer sciences, a point which is all too often ignored by graduate students in the department. If your course load allows it you should consider taking courses in other areas as well. Many people in the department enjoy courses in the humanities and sciences. For courses more likely to be useful toward your degree you might consider other departments in the College of Engineering, or perhaps mathematics. Try not to turn exclusively to the EECS pages in the general catalog.

8.4 EEGSA and CSGSA

The EE and CS Graduate Student Associations perform major orientation efforts in the fall and arrange social activities throughout the year. We also represent student interests to the faculty, and attempt to keep students informed. The dual organizations reflect the particular needs of students in the two parts of the department, although we often collaborate.

EEGSA sponsors department gatherings, such as wine-and-cheese receptions, — watch for posters in Cory Hall — and weekly bagel and donut hours (Wednesdays at 4:20 in the Cory Hall courtyard). CSGSA arranges a department picnic and weekly donut hours (Wednesdays at 3:30 in 597 Evans). At the beginning of the year, CSGSA provides a Big Sibling Program for new CS graduate students, pairing them with senior students to help them adjust. The EE students also receive a list of senior student "contacts" in different technical areas who will provide peer advice. These sheets are available in 211 Cory (if you don't already have them).

There is also a group for women that spans both halves of the department. WICSE (Women In Computer Science and Electrical Engineering) holds weekly lunches and occasionally invites guest speakers. The lunches provide a good time to share the concerns and problems that women experience in this, unfortunately male-dominated, field.

A parting sentiment: if you feel that you have heard more than enough about Berkeley, you are probably right. We love talking about it and hope that it will be the same for you some time later. If

you have any questions about life at Berkeley, find a name and number in the stack of papers in front of you and dial! After all, we can't study all the time...

Mechanical Engineering: Graduate Student Handbook

(SAMPLE)

Introduction

The Graduate Office provides information and resources which are intended to assist graduate students during their time in the Department and to clarify some of the necessary bureaucratic demands of the Graduate Division.

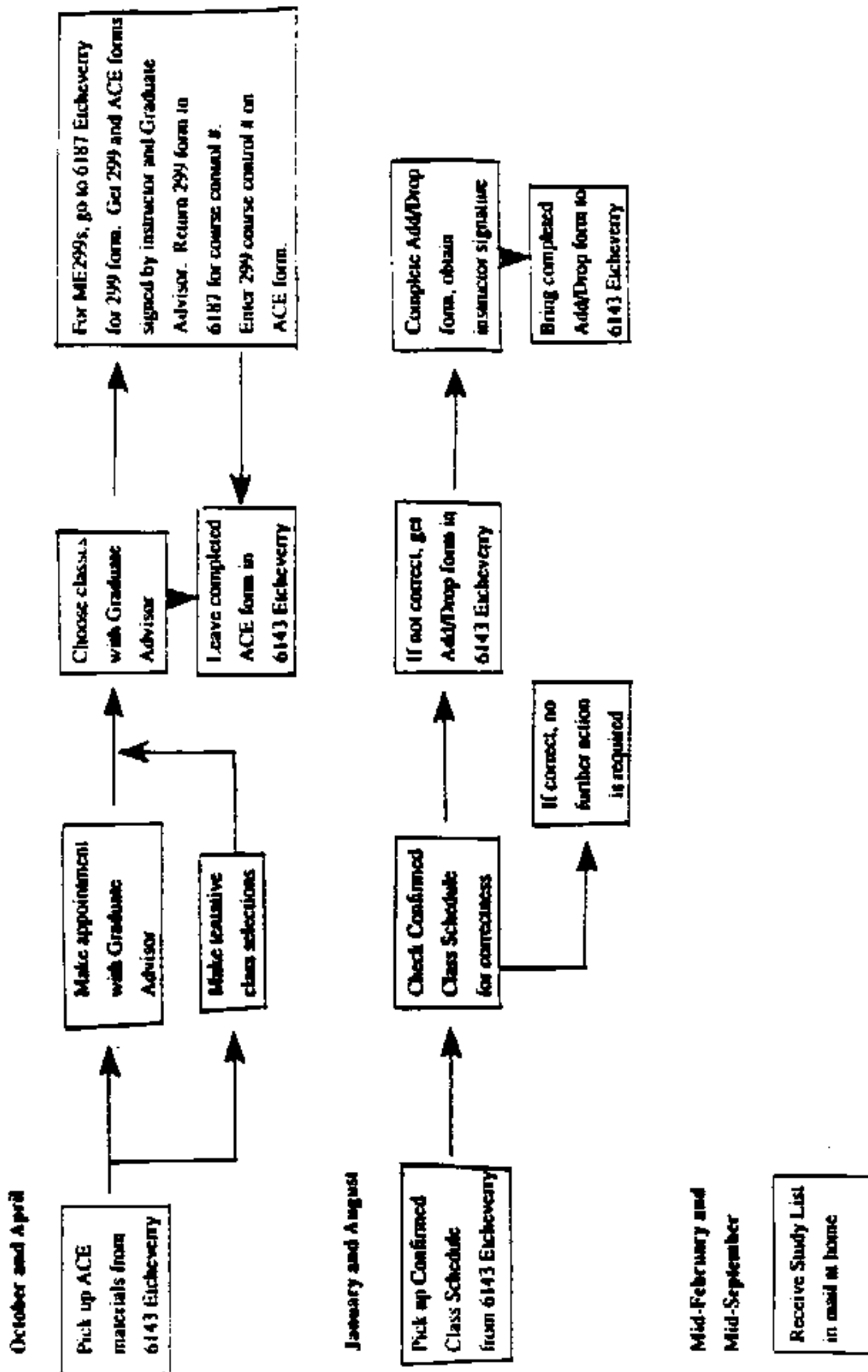
In the spirit that an important part of the Graduate Office service is to facilitate the exchange of useful information, this handbook is meant to complement, not replace, the Graduate Office Services and other, more complete written sources of information.

The Graduate Office becomes quite hectic from January through March, mainly because of all the admissions work which must be completed then. If you do not get the attention you deserve, do not hesitate to insist. With your patience and your willingness to help, we will accommodate your needs as quickly and as effectively as possible.

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CONTINUING STUDENT REGISTRATION



HOW DO I MEET PEOPLE?

The first semester of graduate study at Berkeley can be a lonely experience. It is sometimes difficult to start the process of making new friends, becoming involved in the community, and finding places to go in your free time. Listed are some suggestions from students to make the process easier.

"A great way to meet people is to take ballroom dancing" Reid Brennen, ME Ph.D. Grad. Student. Wednesday night at the 234 Hearst Women's Gymnasium there is ballroom dancing. The times are: 7:30-8:30 Intermediate workshop, 8:30-9:30 Beginning workshop, 9:30-10:30 general dancing. The cost is \$2.00 a night or \$16 a semester.

"Get into a lab. You tend to meet people once you're working in a lab". Reid Brennen.

"International House is a good way to meet people." - Raghuram Devarakonda, ME Ph.D. Grad. Student. The International House has a lot of activities, including trips and tours throughout California, language tables (Eat dinner in Chinese, Italian, Arabic and many other languages), lectures on current international issues and many more activities.

There are many many other avenues for having fun and meeting people in the Bay area. Some ideas are:

1. Classes at Community Colleges/Adult schools. If you are a California resident, courses at the community college are only \$5.00 per unit. These are generally very low pressure classes and you can take anything from life drawing to gourmet cooking to volleyball. This is a good way to meet people from the community. The various community colleges in the area are VISTA, LANEY, AND MERRIT. The Adult schools are BERKELEY ADULT SCHOOL, ALBANY ADULT SCHOOL, and PIEDMONT ADULT SCHOOL. The phone numbers for these schools are listed in the Berkeley/Oakland phone book.

2. Classes through CAL ADVENTURES - Cal adventures is a campus based program that offers classes and/or trips in almost all outdoor sports, for example kayaking, sailing lessons, wind surfing, rafting trips, skiing trips etc. For more information call: 642-4000.

3. Open Exchange Open Exchange is a newspaper-magazine which lists private classes offered in the bay area. They list classes such as massage, conga drum lessons, French, and TaiChi Chuan. This paper can be found on Euclid Ave. in front of Copymat.

4. Campus Clubs and Organizations - A listing of all the clubs on the campus can be found in Resource, a Reference Guide for New Berkeley Students which you received with your orientation packet or call Student Activities and Services at 642-6778.

5. Parks and Recreation

The East Bay Regional Park District is a large district of parks including Tilden, Roberts, Sibley, Redwood, Briones, Coyote Hill and Temescal. These parks offer golfing, swimming, hiking and various other forms of outdoor recreation. For brochures and information call: 531-9300.

6. Physical Exercise and Recreation The campus has several facilities for sports and recreation. These facilities are:

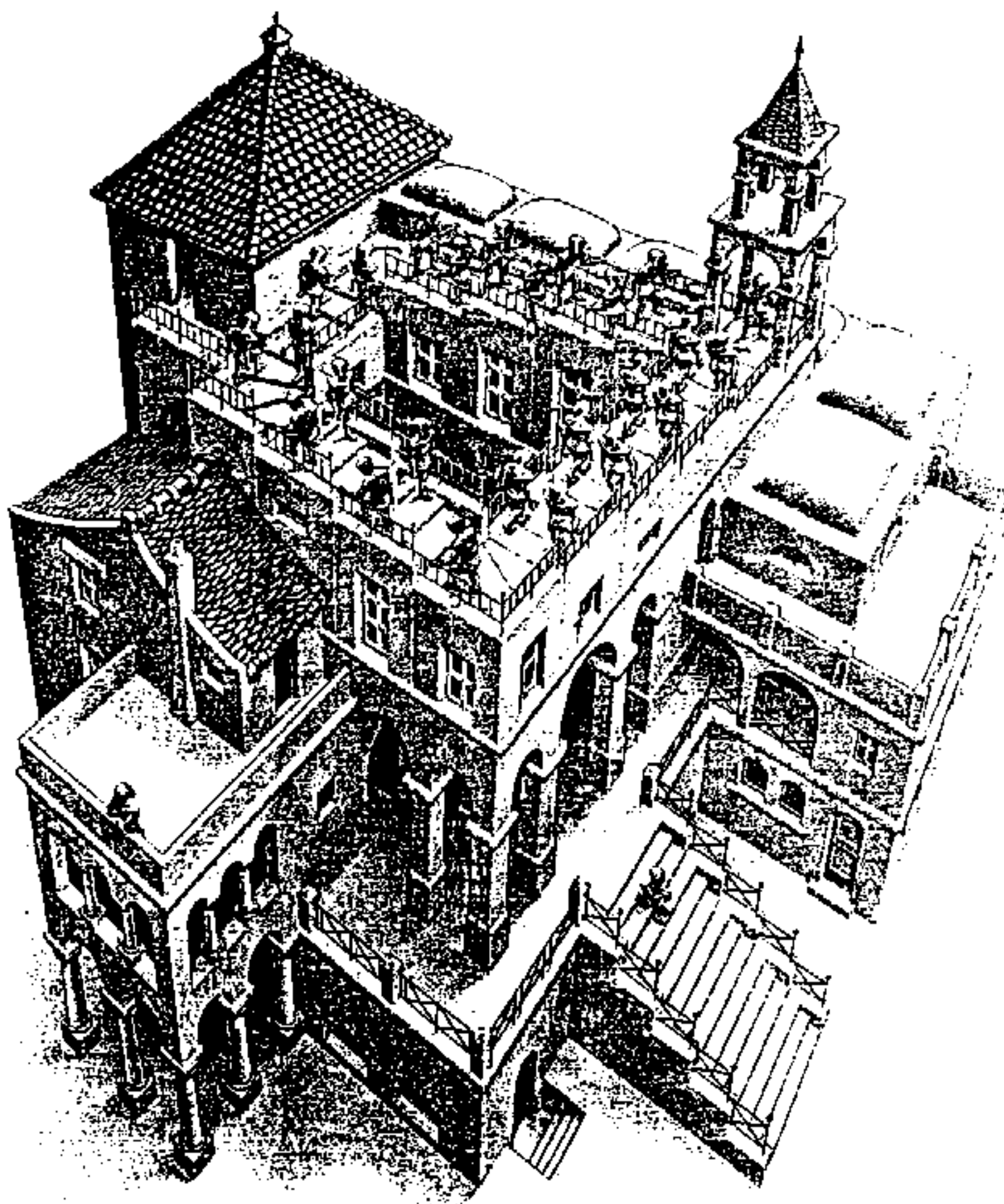
Recreational Sports Facility - Bancroft Ave., (642-8342-info.)

Spieker Pool - Bancroft Ave., (642-6616 - pool hrs.)

Hearst pool - Bancroft Ave., (642-6616 - pool hrs.)

Strawberry Canyon - (lower Centennial Dr., behind Memorial Stadium, (643-6720 - pool hrs.)

WHAT ABOUT HEALTH INSURANCE? All graduate students are required to have health insurance while attending Berkeley. A student must either show proof of insurance with another company or have coverage through GSHIP (The Graduate Student Health Insurance Plan). For questions about GSHIP contact the GSHIP office at 643-7474.



THE PHD SURVIVAL MANUAL

Architecture Graduate Office
Fall Semester, 1991

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I. OVERVIEW: THE OBJECTIVES

Welcome to the UC Berkeley Ph.D. Program in Architecture. This program is interdisciplinary in outlook, reaching into the various disciplines related to architecture and utilizing substantial knowledge from outside fields. The degree "Doctor of Philosophy in Architecture" is conferred upon qualified candidates in recognition of their fulfillment of the program requirements, their command of their areas of specialization, and their original contribution to their chosen fields of study.

The Ph.D. degree in Architecture is appropriate for those seeking careers in research and teaching in architecture and its related areas, or in roles in government or professional consultation, all of which require depth in specialization and experience in research.

This Ph.D. Survival Manual is designed to introduce the terrain, the major players and the rules of the game. Most of the information involves how to survive the three major rounds: 1) fulfilling the preliminary requirements; 2) taking the qualifying exam; and 3) writing the dissertation. Additional survival tips are included in "Staying afloat financially" and "Getting to know your way around Wurster."

II. THE PLAYERS

A. YOU, THE STUDENT

According to the aims and intentions stated in your application for admission to the Ph.D. Program, you will carry out a program of advanced study and research, both on the basis of formal classwork and of individual investigation. You will specialize in three individually tailored areas of study by way of one major and two minors. You will also be required to fulfill your foreign language and research methodology requirements. (See "Round One: Fulfilling the Preliminary Requirements.") After that, you will take your qualifying exam, which qualifies you to be a "Ph.D. Candidate" (Round Two). Finally, "Round Three", you write your dissertation based on independent research and original investigation.

B. FACULTY ADVISOR

All Ph.D. students are asked to choose an individual faculty advisor upon entering the Ph.D. program. Naturally, you should select a compatible faculty member to work with; preferably one interested in and/or sympathetic to similar issues. (See List of Architecture Faculty Specialties, p. 27.) The faculty advisor need not be the director of your dissertation research, however. The faculty advisor provides counsel on matters pertaining to course work and degree requirements. S/he also maintains a familiarity with your overall progress, and each year reports on your progress to the Ph.D. Committee. It is your responsibility to maintain regular communication with your advisor, even during periods when you or the faculty member are on leave from the University. A change of advisor requires the approval of the Ph.D. Committee (see "Petition for Change of Ph.D. Advisor" at the end of this book).

G. OTHER STUDENTS

Your fellow Ph.D. students will be one of your richest resources. You can compare notes, exchange reading lists, discuss required coursework and test-taking strategies, support each other and commiserate. The department provides a small office for Ph.D. students (490 Wurster), where some 10-12 people share desk space. Space is allocated at the first Ph.D. students' meeting in the Fall Semester. Watch your mailbox for notification of this meeting.

Some students will share offices with faculty members for whom they teach or do research. No matter where you are located, it is to your advantage to stay in contact with the other Ph.D. students.

The Ph.D. dissertation is the most important requirement of the Ph.D. Program. The dissertation embodies the results of original and independent research, and should represent a meaningful contribution to the field of architecture.

A minimum period of one academic year is required for the preparation of the dissertation, normally spent in residence. Students are encouraged to select topics that can be carried out in one or two years and to observe the limitation on normative time set by the Graduate Division.

A. DISSERTATION COMMITTEE

The preparation of the dissertation is supervised by a committee of three faculty members, one of whom must be from a department outside Architecture. This committee guides the candidate in his or her research and passes judgment on the merits of the dissertation.

The chairperson of the dissertation committee must be a member of the Berkeley Academic Senate. And normally the chairperson and the majority of the Committee members are in the student's home discipline. In addition, the Chair shall not have acted as chairperson of the qualifying examination committee for the same candidate.

Not all dissertation committees are easy to work with, therefore, to minimize inter-member friction, try to arrange a compatible and congenial combination. Granted, most committee members convene only for the qualifying exams, but you should, however, be aware of conflicting expectations. In other words, know your professors well enough to be able to anticipate conflicting expectations and contradictory advice. For example, Ph.D. students in the Social Basis of Architecture and Urban Design sometimes get caught in the middle when one committee member expects a quantitative discussion of the results, and another expects a qualitative discussion. The bottom line is make sure all committee members have a common and thorough understanding of the nature of the proposed dissertation.

B. FINAL ORAL EXAMINATION

After you have presented the final draft of your dissertation to your committee, but before final approval has been granted, your committee members may, if necessary, require you to defend the dissertation in a formal oral examination. (This happens very infrequently.)

C. FILING FEE

Under certain circumstances, you need *not* be a registered student at the time that you file your dissertation. Instead of registering and paying the University Registration Fee (and the Nonresident Tuition Fee, if applicable), you may--if you meet the eligibility requirements stated below--apply for the Filing Fee. "Filing Fee" is a special status which allows you, for a fee of \$160.50, to turn in your dissertation without full formal

AT THE TIME OF APPLICATION FOR THE QUALIFYING EXAM, SUBMIT A COPY OF THIS FORM
ALONG WITH YOUR DISSERTATION PROSPECTUS, TO EACH MEMBER OF YOUR EXAMINATION
COMMITTEE

DEPARTMENT OF ARCHITECTURE
DISSERTATION PROPOSAL FORM

Name _____

Address _____

Phone _____

Faculty Advisor _____

Study Area: Building Science ()
Design Theories ()
History ()
Social Factors ()

Major Field: _____

Minor Fields:

First Minor (outside) _____

Minor supervisor _____

Second Minor _____

Minor Supervisor _____

Proposed dissertation title: _____

Proposed dissertation committee:

_____ (outside member)

Dissertation prospectus: (Please attach)

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ENGINEERING COOPERATIVE PROGRAM

The cooperative program for M.S. candidates is available to provide engineering students an opportunity to alternate periods of work and study and thus obtain valuable industrial experience while studying for a degree. Four semesters are usually required to obtain a master's degree; the first two semesters are spent in full-time study at the University, the third is spent working on a full-time basis with an industrial company, and finally, the last semester is spent in full-time study. However, programs are arranged on an individual basis. In general, a student must be in good academic standing with a GPA of 3.00 or better. Students interested in this program should contact the Engineering Cooperative Program, 209 McLaughlin Hall (2-6385) University of California at Berkeley, California 94720.

WOMEN AND MINORITY GRADUATE STUDENTS

The EECS Department is committed to increasing the diversity among graduate students in the department and to developing programs and policies which create an environment of support for enrolled graduate students. The departmental Graduate Offices, and the Academic Coordinator for Student Matters (643-8205), work together to provide the following services:

- individual graduate admissions advising
- coordination of workshops which address graduate admissions matters and financial aid
- arrangements for campus visits by prospective students
- advocacy and problem-solving support for enrolled students
- support for EECS student organizations through the Student-Faculty Relations Committee
- service as an information clearinghouse for women and minority graduate students

OTHER RESOURCES

A number of specific resources are:

1. **Student Groups** (for more details, see page 91)
WICSE (Women in Computer Science and Engineering), SWE (Society of Women Engineers), BGESS (Black Graduate Engineering and Sciences Students), HES (Society of Hispanic Engineers and Scientists).
2. **Faculty Mentor Program**
Each entering minority graduate student may choose, in addition to a Major Field Advisor, a Faculty Mentor in the department who serves as an informal advisor. Professor Angelakos is Coordinator of the Faculty Mentor Program.
3. **Night Travel**
There is a UC Berkeley shuttle bus service connecting Hearst Mining Circle, the Berkeley BART station, and surrounding Northside residential areas until 12:20 AM during each semester Sunday through Thursday. There is another service between Moffitt Library and Southside residential areas until 1:40 AM, Sunday through Thursday, and 12:20 Fridays during each semester. Contact 2-5149 for information. There is also a night escort service available to and from campus buildings, Sunday through Friday, throughout the year. Call 2-WALK (2-9255) for information or 2-6764 to arrange for an escort.
4. **Other Resources**
The UC Women's Center, Building T-9, 642-4766, and the Faculty Assistant to the Vice Chancellor for the Status of Women, 7th Floor, University Hall, 642-7609, are both resources for women students at Cal Berkeley.

BUILDING SECURITY (A Warning Note)

Cory Hall has twice been a target in a nationwide series of bomb incidents over the past several years. The person(s) responsible have made the explosive devices to blend with the environment. In both instances, the bombs in Cory detonated as they were moved by unsuspecting persons, resulting in serious injury. Therefore, if you see a box, letter, briefcase, or package, and you don't know where it came from or how it got there, **DO NOT TOUCH IT!** Contact the Department Engineer for Cory Hall, in Room 203 Cory (642-9888); the receptionist in 231 Cory; or the University Police (642-3333). If this should occur in Evans Hall, contact the Business Manager for the CS Division, in Room 575 Evans (642-5244); the receptionist in 571 Evans; or the University Police (642-3333).

Do not leave any packages or boxes in the hallways to be disposed of, leave them in your office or lab with a note for the custodians. The custodians will not take away boxes left in the corridors. Your cooperation will reduce the frequency of reports of suspicious articles, and it will thereby reduce confusion when an article of suspicious nature must be investigated.

A videotape on bomb recognition and awareness will be shown during orientation week. Make every effort to see it.

In case of fire, extinguishers can be found on every floor at the corners of the corridor rectangles. Emergency assistance may be obtained by calling 642-3333.

Emergency Building Evacuation

In the case of fire or other emergency, Cory Hall and/or Evans Hall will be evacuated. The following things will happen: a loud alarm will sound; evacuation procedures may be announced over the public address system (if you hear the alarm and no instructions follow, leave the building anyway in a controlled and deliberate manner); an evacuation message will appear on all computer terminals; safety monitors in yellow helmets will direct you to the nearest safe exit.

EVACUATION PROCEDURES:

1. Quickly gather all your personal valuables.
2. Close all windows and doors (do not lock doors).
3. Move calmly and carefully out of the building.
Do not run.
Do not use the elevators.
4. Move at least 100 feet from the building.
Do not block the exits.
5. Follow the instructions of the safety monitors in the yellow helmets.

Earthquakes

Earthquakes are a geologic fact in California. A few precautions will enable you to live in earthquake country with peace of mind. Depending upon where you are and the nature of the tremor, it may feel like the building is swaying in a high wind, or trembling, or the ground is sharply jolting or rolling. Most earthquakes only last several seconds, but what you do during that time may be very important.

- If you are outside, move to an open area. Stay away from buildings where cornices, glass, or other objects could fall, and stay away from lamp posts and other structures which might topple.
- If you are inside, get under a sturdy piece of furniture or building support, such as an arch or doorway. Stay away from windows, open bookshelves, and other objects which may topple or slide. Wait until the shaking stops and listen for evacuation announcements. Do not use the telephone. Emergency personnel may need clear communication lines.

After Hours Building Access

Cory Hall is protected by an electronic security and surveillance system. Cameras monitor each door 24 hours a day. The doors are unlocked from 7:30AM until 6PM, after which time access is obtained by electronic card key only. Students needing keys must fill out applications to be signed by their faculty advisors, the chief of building security (for teaching labs), and the Department Engineer. Applications are available in Room 299 Cory or 571 Evans Halls. Immediately report lost keys to these offices.

IMPORTANT: Lending out cardkeys or letting unknown persons enter Cory Hall after regular building hours is PROHIBITED.

Health and Safety Questions

The Department Engineer, and his staff, will be happy to answer inquiries in Room 203 Cory (642-9888). An active Safety Committee includes graduate student representatives who can also provide answers to your safety questions.

* During special events on campus, and especially those held at the Greek Theater, a private security firm patrols Cory Hall entrances. Uniformed guards may request that students present their electronic card keys and student identifications to gain access to the building. We appreciate the student's cooperation.

HANDBOOK FOR GRADUATE STUDENTS

DEPARTMENT OF FORESTRY AND RESOURCE MANAGEMENT

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FOREWORD

The purpose of this handbook is to provide helpful information for graduate students about life in the Department of Forestry and Resource Management. A wide range of information is included to help students find out what questions to ask as well as where to get questions answered. The topics range from how to use the Department's copying machine to who may serve on a Qualifying Examination Committee.

Some of the material is quite formal and has been condensed from a wide variety of materials that spell out regulations affecting a student's progress towards a degree. Some guidelines and regulations are flexible, others less so. Your Graduate Advisor, Guiding Professor or the Student Services Advisor can help you sort out these myriad regulations.

Please direct any feedback that you have for improving this handbook to the Student Services Office, 133 Mulford.

8.6 Guiding Professors and Graduate Advisors

All students accepted into the graduate programs of the Department *must* be associated with a faculty member called a Guiding Professor (more commonly known as a major professor elsewhere). This is a member of the faculty whose interests are similar to the student's and who agrees to give advice and counsel on the development of the student's program of study, research topics, and other academic and professional matters. In addition, students in the MSI program must work with a three-member thesis committee chaired by the guiding professor. PhD students will have a four-member Guiding Committee headed by their Guiding Professor as well as a three-member Dissertation Committee, also chaired by their Guiding Professor.

Upon entering the Department each student is assigned to a Graduate Advisor. The names of advisors and their current advisees are posted during the beginning of each semester outside the door of Room 133 Mufford. It is the student's responsibility to be aware of their assigned graduate advisor and to hold at least one consultation per semester. This should occur well in advance of the time ACE forms must be signed. The advisor assignment is flexible and advisors may be changed if both current and new advisor are agreeable to the change. However, the guiding professor and the graduate advisor may not be the same individual as this could result in a conflict of interest. The assigned graduate advisor has the official duty of verifying that a student is proceeding in her or his graduate program and completing courses according to Departmental and University policies. Graduate advisors are faculty members officially appointed to this role by the Graduate Division with one advisor acting as chair. The Graduate Advisors for the 1990-91 academic year are:

Keith Giltess, Chair
Barbara Allen
Greg Biging
Louise Fortmann
Bill Libby
Bob Martin
Mike Morrison
Carroll Williams

The responsibilities of all graduate advisors include, in conjunction with advice from the guiding professor: (1) assisting students in choosing programs of study, (2) endorsing schedule request forms, (3) acting on petitions to alter confirmed class schedules, (4) completing and updating student programs forms, and (5) supplying information about a student's progress when requested by the Dean of the Graduate Division, and (6) nominating or appointing various advisory and examination committees.

In addition, the Chair of the graduate advisors, in consultation with other advisors and faculty, is responsible for (1) recommendations for admission, or denial, of applicants, (2) acting on petitions for withdrawal, readmission, and addition or change of major, (3) reporting on examinations for higher degrees, (4) endorsing applications for advancement to candidacy, and (5) recommendations for probation, dismissal, and lapsing or termination of candidacy.

It is expected that students will work closely with their guiding professors in developing both their programs of study and their research topics. Typically, the guiding professor acts as a mentor, hence acts to promote the student's interests while the graduate advisor acts to ensure that the University's interests are upheld. Graduate advisors and guiding professors keep regular office hours and must be available for consultation during them. It is expected that students will attempt to see faculty during posted office hours. If that is not possible, then appointments may be arranged at other times.

It is considered the students' responsibility to maintain regular communication with their guiding professors and graduate advisors. It is also the student's responsibility to make sure that their advisors have signed off on a tentative academic program form by the end of the first semester of residence. This program must clearly specify how the breadth requirements are to be satisfied. Any petitions to the Graduate Programs Committee for consideration of breadth course substitutes should be submitted during the first semester of residence. All doctoral students must form and meet with a guiding committee during the first semester of residence and obtain approval by that committee for a program of study.

8.10. Publication of Research

Research performed using the facilities of the Department of Forestry and Resource Management, or the expense of its personnel, or while being paid from University funds, is in the public domain and subject to supervision and approval of the Department Chair. Authorship of publications should include all individuals who have made substantial contributions of significant scientific substance to the specific work represented by the publication. There are two means whereby students may become involved as authors in research that is publishable.

The first is from research a student may do during his/her work obligation as a Research Assistant. This work normally is on a problem that faculty will have formulated and established. Because of this, any papers prepared from this work are likely to be written by the professor with the professor as the senior author. The student may be asked to be co-author. It is conceivable, however, that some research could be planned and carried out, primarily by the student. In this case the student would be the senior author if he/she writes the paper.

The second publishing opportunity arises from graduate student thesis or dissertation research. In this respect there are two possibilities. In some cases, a student comes to the Department with a preconceived problem that he/she wants to attack or develop it following arrival, and sometimes does so without financial or major equipment support from a faculty project. Since this research was conceived, carried out, and finalized alone, any publications written on it by him/her should not include a faculty member and he/she would be the senior and sole author unless he/she chooses otherwise. This is unusual for theses, but common for dissertations.

The typical MSI student needs help in finding an appealing problem and thus takes a problem that a faculty member has conceived. Because these are problems that fit into the faculty member's overall planning, additional support is usually needed in terms of material, supplies, new equipment, etc. This problem thus not only serves as the student's thesis, but is a part of the faculty member's research program. Publication of the research should be shared between the student and the faculty member.

The person doing the main portion of the writing should be the senior author with other individuals as co-authors. Since the student, in the case of thesis research, will have shouldered the main burden of performing the research, he/she should always have the first option of being the senior author by accepting the responsibility of preparing the manuscript if he/she chooses. Because the Department's research responsibility is not completed until results have been appropriately communicated, if the student has not made reasonable progress toward accepting the responsibility of preparing the results for publication within a reasonable time (approximately one year after filing the thesis), the faculty member may assume this responsibility. In this case, the person preparing the article would be senior author with the student listed as co-author.

The purpose in clarifying these points is to avoid any hard feelings that might arise out of the sensitive matters of publication rights and authorship. In the stress of the effort spent and frustrations suffered in preparing the thesis, one is apt to forget where the genesis of the problem and the support provided along the way came from. *Students are encouraged to discuss plans for publication with their guiding professor as early as possible to avoid misunderstanding.*