Physics Survival Guide

The Physics Graduate Student Council is a committee of six or seven graduate students elected in late spring by the physics graduate student body to serve as a connection between the graduate students and the administration. The PGSC can be reached via e-mail at osupgsc@gmail.com.

The PGSC acts as a liaison between the faculty, the administration, and the graduate students within the physics department. In general, we are here to help physics graduate students prosper in physics at OSU. We want to hear from you about any questions or concerns you have regarding physics at OSU so we can ensure that the department is made aware and can take action if necessary. To this end, the council provides a forum for student complaints and grievances and makes recommendations to help students deal with difficult situations, and often present these grievances to the administration. During Autumn semester, the first year students will elect a representative from their class to the PGSC to help the PGSC better understand the unique issues and concerns that often arise in the first year classes.

NECESSITIES OF LIFE

Housing:
OSU provides a variety of on-campus housing choices for graduate students. There are two graduate dorms, South Campus Apartments and Neil Ave Building (dorms). Neil Ave. Dorms (located at the corner of Neil and 10th Ave) has air conditioning and is located above The Marketplace (cafeteria which accepts both meal plans and money). The South Campus Gateway Apartments are furnished apartments on campus that tend to be quite pricy but are also very nice. See here for more details. The OSU Housing office can be reached at (614) 292-8266. Married students can apply to live in Buckeye Village.

International students can consult the Office of International Affairs in Oxley Hall (1712 Neil Avenue, (614) 292-6101, campus phone: 2-6101). They can help you and other people looking for roommates and assist you in finding housing, both permanent and temporary.

The area surrounding campus has many rental options. There are numerous rental companies in the area which can help you find housing, but it may be better and less expensive to rent from a smaller company or individual. Apartments for rent are advertised in the OSU Lantern, Columbus Dispatch, neighborhood newspapers, and online on sites like Craigslist. The Off-Campus Housing Center has lists of people seeking roommates, useful information about Columbus housing, as well as rental listings. The OSU Office of Off-Campus Housing (3106 Ohio Union at 1739 N. High Street, (614) 292-0100, campus phone: 2-0100) has detailed information about many local apartments.

Most graduate students live off campus in apartments. Columbus is known for having very affordable housing. You can easily live alone paying $650/month for rent or with roommates for $450/month. Most people live within about 2 miles of campus, though some do commute from further.

South of campus, beyond 9th Avenue and around Neil Avenue is one of the more popular places for grad students in our department to live. The #8 bus runs up and down Neil Ave.
in this area (closer to campus) is kind of run down and has some crime. Further south is Victorian Village ([http://en.wikipedia.org/wiki/Victorian_Village](http://en.wikipedia.org/wiki/Victorian_Village)), with quite a few very nice houses and apartments, and some affordable options. East of Victorian Village, along High Street and south of 5th Ave is one of Columbus's swanky areas: the Short North. With lots of bars, art galleries, and interesting shops, it can be more expensive and/or less spacious. Fewer grad students live there.

A lot of undergraduates live in the area directly north and northeast of campus, and most weekends you'll find people out on their front porches playing beer pong, lawns littered with red cups, and big parties. However this area is very accessible to the Physics Research Building (PRB), so it is popular among a lot of physics graduate students. The campus bus system (CABS) has an East Residential (ER) route which runs along 4th and Summit streets north to Hudson and provides easy access to the PRB. The area due east of campus (east of High street and north of about 12th Ave) has a similar demographic, with quite a bit of Greek housing; not many physics graduate students live there. These areas have some crime. South of 12th Avenue and east of High Street is more run down.

Clintonville, north of Dodridge/Arcadia, is a nicer area with a lot of local shops and restaurants around which is very accessible to the PRB via the #2 bus (or a 10 minute bike ride or a 25 minute walk). There are many half-double houses for rent scattered among family-owned homes. Olentangy Village, which is a very large apartment complex about 1.5 miles north of campus is a popular, if slightly expensive, place to live among graduate students ([http://www.olentangyvillage.com/](http://www.olentangyvillage.com/)). Another large complex popular with graduate students is University Village, which is northwest of campus ([http://www.universityvillage.com/](http://www.universityvillage.com/)). The #1 bus route connects this area to campus, and there is a UV Shuttle too.

West of campus is a little bit tougher to get to but is nonetheless a very nice area, with nice, affordable apartments which is popular with a lot of grad students. The #22 and #31 bus routes connect this area to campus. Southwest of campus is an area called Grandview ([http://en.wikipedia.org/wiki/Grandview_Heights,_Ohio](http://en.wikipedia.org/wiki/Grandview_Heights,_Ohio)), which has a lot of restaurants and bars, and does not resemble the campus area. A lot of young professionals as well as other professional students like medical students live in this area.

Remember that when looking for a place, if you would like to not have to drive to work, look for a apartment on the COTA bus lines 1, 2, 8, 22, 31, or the CABS ER bus line. These routes all go through campus so if you live on or near them you can ride the bus. COTA access is paid for in your university fees. Check out COTA ([http://www.cota.com/](http://www.cota.com/)) and the campus CABS ([http://ttm.osu.edu/cabs](http://ttm.osu.edu/cabs)) for the bus routes and schedules. Google Maps also has a fairly good transit option to help you figure out a route. Biking is also a good option for the majority of the year; we have a locked bike room in the building. Parking on campus can be a hassle, as they sell more passes than they have spots, particularly on main campus, and the passes can be quite expensive. See [http://www.campusparc.com/](http://www.campusparc.com/) for more info on passes.

Living on campus is another option, though it is more expensive. Most graduate students do not live on campus. It is not bad, but it is a small room, bathroom and perhaps an oven and kitchen sink. However, if you are looking for some place to live short term, you can get a feel of where you would like to live, some people have done that in the past.
Some students even buy houses or condominiums while they're here. That's another option. If you would like to look for place around campus, you can look at [http://offcampus.osu.edu/](http://offcampus.osu.edu/) and at [http://www.metro-rentals.com/](http://www.metro-rentals.com/). All of the neighborhoods typically listed on here are generally good. Brian, a member of the PGSC compiled a list of local apartment complexes and the like; you can find more information on that here ([http://pgsc.physics.osu.edu/housing](http://pgsc.physics.osu.edu/housing)).

No matter where you decide to live, as a graduate student at OSU you are also able to access student legal services which can look over and review any leases or contracts you are asked to sign. More information about student legal services can be found at [http://studentlegal.osu.edu/](http://studentlegal.osu.edu/) and in the legal section found below.

If you are looking for physics grad roommates, email PGSC (osupgsc@gmail.com) and ask if anyone else is looking for roommates. We have the full list of incoming students. If you need assistance finding a place to live, PGSC members and other graduate student volunteers can help you. Keep in mind that a very good price on an apartment may mean that the area is not safe; please consult someone if you have any questions about where you should live.

### Banking

A wide variety of banks and savings institutions are available. The major banks near campus are:

- Chase (12th and N High)
- Huntington (17th and High)
- PNC (16th and High)
- 5/3 Bank (within the Wexner Medical Center)
- US Bank (15th and High--ie, in the Ohio Union)
- Credit Union of Ohio (11th and Neil).

ATMs can be found in many campus locations and along High Street and in the OSU bookstore. Most banks have free checking and savings account options with restrictions like having pay checks deposited directly or being employed by OSU. It is probably a good idea to call around and check your options. You will need to set up direct deposit of your paycheck with the administration in the main office.

### Telephone

#### Landlines

If you are interested in connecting a landline, you can establish phone service by calling AT&T at 1-800-660-1000. There is useful information about establishing phone services on the web at [http://att.com](http://att.com). If you live in the dorms, you will use the university phone system, see more information [here](http://att.com). When you establish service, you must designate a long distance company. Popular options are MCI, AT&T, and Sprint; these, as well as many others, are listed under “Telephone Communications Services” in the yellow pages. All the main long distance companies are on the web and some have special offers for customers signing up for service on the web.

#### Cell phones
Most graduate students do not have a landline and have only a cell phone. The major companies in the area are Verizon, AT&T, T-Mobile, and Sprint. Cell phone service from these major companies in Columbus is generally pretty good. Previously, AT&T was the only service that worked well in the basement of the PRB, but this has been debated recently. Service can definitely be spotty throughout the PRB. All the major companies also provide a discount for Ohio State employees so be sure to mention that. Look on the web to find the closest store.

*Campus calls*

When calling from one on-campus extension to another, dial only the last 5 digits of the phone number. To dial off campus, dial 9, followed by the full 7-digit telephone number. To dial to campus from an outside line, dial the full 7 digit campus number.

*Internet/Television:*

Encrypted wireless internet (osuwireless) is available on campus and can be accessed with the usual name and password. Find information about it [here](#). There are also open wireless networks available at many nearby restaurants and coffee shops although this may not be as secure. Some students choose to purchase internet service at their home or apartment. The major internet providers are Time Warner Cable, WOW, and AT&T. These companies also provide cable television service. If you do not want to pay for cable television you can still pick up some public stations such as CBS, ABC, NBC, FOX, and PBS with the purchase of a digital antenna.

*Security:*

Beware of theft; most thefts are crimes of opportunity--stolen when items are left unattended in public places. Items commonly stolen include textbooks, bikes, personal electronics, tools and telephones. It is a good idea to [register your bike](#) with the OSU campus police. There have been incidents of thefts within Smith Lab and PRB. To help keep the building secure do not let others into the building during the night. If they are supposed to be in Smith Lab or the PRB after hours they will have their own key. Report any thefts within Smith Lab or PRB to Phil Davids in the main office. There have been many thefts from offices in the PRB. However all the thefts have been from unlocked rooms. The best way to protect your things is to lock your door. While uncommon, crimes such as muggings do occur on campus. Be careful, especially if you walk at night. It is smart to avoid walking alone on campus at night, especially just north of campus and on the southern part of the campus and on High Street south of around Twelfth Avenue.

*Parking a Bike:*

If you have a bicycle you can leave your bike in the “Bike room” in the physics building. The room number is 1170B in the PRB. It is preferred that you bring your bike into the building through the loading dock door rather than the two main entrances of the building. The bike room works on an honor system: You should only take your bike from the room. Make sure that you close the door after leaving so that everyone’s bike remains safe. Hooks are provided and you should use those rather than just standing your bike in the middle of the room because it makes it easier for everyone to maneuver their bikes. It also should be noted that the bike room is not meant for long term storage of your bike. Bikes left in the room without being moved for more than 6 months will be raffled off to other graduate students.

*Parking a Car:*


Parking permits

See [http://osu.campusparc.com/](http://osu.campusparc.com/) for more information. Graduate Students on appointment are eligible for “B” staff parking stickers which cost around $537 per year. These permit you to park in all student and staff spaces during the day and in almost all campus spaces after 4pm. Garage stickers are also available for around $700, but the garages fill up early. You may choose to purchase a standard “C” student parking sticker for around $364, declining the option of parking in staff spaces during the daytime. West campus parking stickers of both “B” and “C” type are available for much less (around $110), but most students who rely on driving to school daily consider this parking arrangement inconvenient. West campus passes do allow you to park in A, B, and C spots after 4:30pm on weekdays and all day on weekends so some students who come to campus after hours find this convenient. You can also pay to park by the hour if you need to come to campus for a short period of time.

You can order parking passes from [http://osu.campusparc.com/home](http://osu.campusparc.com/home) or order directly from the CampusParc office in Bevis Hall (located in the west campus). (CampusParc is a private company contracted by the university.) They should have a list of physics students with appointments, though it may be helpful to bring your letter of appointment in case they haven't yet received the list. You will be towed or ticketed if you park in the wrong place and parking is enforced 24/7. There have been times where even parking in the loading dock for more than 15 minutes has been ticketed! In many cases (but not all) your first parking ticket can be waived. It is wise to obtain and study a map of parking locations so that you can avoid problems. Beware of towing, especially on football Saturdays (even on on-campus streets, read signs carefully!), or on ROTC drill fields and marching band practice areas. The most up to date information can be found at the transportation and parking website, [http://osu.campusparc.com/home](http://osu.campusparc.com/home).

Obtaining an Ohio Driver’s License and License Plates:

Car license plates can be purchased at 4503 Kenny Rd. Other locations are listed in the yellow pages under “License Services.” Before going to buy plates you should check the Ohio Bureau of Motor Vehicles (BMV) web site: [http://bmv.ohio.gov/index.stm](http://bmv.ohio.gov/index.stm) under registering a vehicle to see what you need to take with you. Columbus is in Franklin County. If you desire to get an Ohio driver’s license, information can be found on the same BMV website. Look for driver’s license information for new residents. When you get your driver’s license you can also register to vote. To obtain a driver’s license in the US for the first time it is necessary to take a written test and obtain a learner’s permit. There is information about this on the website as well, and the BMV publishes a booklet of driving rules which must be studied well in order to pass the written test.

The exam is entirely closed book and closed note. After obtaining a learner’s permit you can practice driving only with a licensed driver, and, when comfortable, you can take the driving test. The legalities of having car insurance, your vehicle tagged and registered, and having a valid license is taken seriously in the US.

Public Transportation:

The Campus Area Bus Service ([CABS](http://cabs.osu.edu)) covers the main campus and west campus. CABS maps are posted at all stops, and printed maps and schedules can be obtained around campus.
The Central Ohio Transit Authority (COTA) bus system, extensively covers the greater Columbus area. There are many COTA stops on campus, often lining up with the CABS stops. Schedules are available in the Ohio Union or on the web. All students can ride COTA for free, just by swiping their student ID. (OK - it's not really free – all students are charged a small mandatory fee each semester for this service.) Without ID, rides are $2.

PURCHASING:
All of these stores are located near campus or are on a COTA bus line.

Food, Groceries:
- Giant Eagle (High & Arcadia; Graceland; Neil & Buttles)
- Kroger (High & King; North Broadway & High; Olentangy & Dodridge, Northwest & Chambers)
- Lucky’s Market (High & Arcadia -- focus on local and natural foods)
- Clintonville Community Market (200 Crestview Rd -- a grocery co-op with a nice spice selection)
- Whole Foods (Lane & North Star)
- Crestview Market (Chinese grocer, 2950 N. High near Giant Eagle)
- North Market (29 Spruce Street, downtown area - more upscale, local groceries)

Further away, but still of note:
- CAM Asia/International Market (Olentangy River Rd & Bethel)
- Patel Brothers (Saw Mill & Village Parkway)

Farmer’s Markets (seasonal):
- North Market (29 Spruce St, downtown area)
- Clintonville Farmer’s Market (Orchard Ln & High)
- Worthington Farmer’s Market (N High & E New England)

General Hardware:
- Beechwold Ace (Weisheimer & High)
- Schreiner Hardware (Hudson & High)
- Zettler Hardware (E. 12th near Summit)
- Lowes (Hudson & I-71)

Drug Stores and Pharmacies:
- CVS (King & High; Lane & High, Doodridge & High, Neil & Eleventh)
- Walgreen’s (Graceland)

Many grocery stores, including most Kroger and Giant Eagle Stores, have pharmacies, and the Wilce Student Health Center has its own pharmacy and small drug store (if you have OSU student health insurance this is the ideal place to get your prescriptions)

Other Stores of Interest:
- Big Lots (Olentangy & Dodridge) - surplus: school supplies, clothes, linens, housewares, food, furniture, toys, always lots of miscellaneous items.
- K-Mart (Bethel & Olentangy) - discount department store
- Target (Lennox Center, south on Olentangy River Road; Graceland, north on N High Street;
High & 16th) - discount department store
• Wal-Mart (near Tuttle Crossing Shopping Center at the end of the #18 bus route)
• Kohl's (Olentangy & E.N. Broadway) - moderate price department store
• Marshall's (Bethel & Olentangy) - furniture, clothing
• Used Kids (in a basement near 18th & High) - good values on used CDs and tapes. Also collector's items, videos, and vinyl!
• Old Time Pottery (E. Morse Rd.) - inexpensive kitchen and home goods
• Ohio Thrift Stores - used clothing and household items. Clothes, accessories, and linens are half-price on last Wednesday of the month. Nearest stores at Cleveland Ave. & 161, also at Northern Lights shopping center
• Salvation Army Family Store (1675 S High St) - very inexpensive used clothes, furniture, books
• Goodwill (High and Hudson) - used clothing, books, and household items; often have a good selection of coats.
• Goodwill (Morse Road) - has a large furniture store
• Volunteers of America (near Indianola & Broadway)
• IKEA (Columbus, exit off 71 North) - Household items and furniture, day trip - bring a truck!
• Shopping Malls: (All have food courts)
• Lane Avenue (Near Lane & North Star) - mostly upscale stores
• Graceland - (High & Morse Rd.) - low to moderately priced stores
• Tuttle Crossing - (270 & Tuttle Crossing) - moderate to upscale
• Easton Town Center - (71 North, then 270 West [dedicated exit] or by bus #2 (N. High) to #95 (Morse Rd.) - new, big and snazzy
• Polaris Town Center (On Polaris Parkway and I-71) – massive shopping district that has just about everything.

Bookstores:
(Always mention you are an OSU student – you might get an additional discount!)
OSU Bookstore (between Dreese Lab & the Stadium) - books, supplies, gifts. However, YOU MAY NOT FIND YOUR PHYSICS BOOKS HERE! The Physics department has had some problems with the OSU Bookstore, so you will only find your physics books at SBX and Long's (Barnes and Noble).

Long's (Barnes and Noble): The Ohio State University Bookstore (11th & High) - books, paper and art supplies, gifts, OSU items

Book Loft in German Village (631 S. 3rd St.) – legendary independent bookstore

Used Bookstores:
• Discount Paperback Books (Chittenden and High) - all types of books - very large section and science sections, cookbooks, comics, etc. - discounted newer titles (It's a rat's nest that has everything!)
  • Karen Wickliff Books (Dunedin & High) used (and mainly old) book store crammed full, cash-only!
  • Half Price Books (near Lane & North Star; also at Bethel & Sawmill; also at Graceland) - lots of used and new books (mostly new), many at half price.
• St. Stephen’s Episcopal Church (Woodruff & High) - sells used books in their basement Wed. & Thurs. 11-2. Lots of bargains.

**Public Libraries:**
The main branch of the Columbus Metropolitan Library is located downtown at 96 S. Grant Ave. There are also many branches of the library in various parts of the city. The closest one to campus is the Northside branch, 1423 N. High St. In addition to lending books, the libraries also lend CDs, audio tapes, video tapes and DVDs. Information and catalogue on the web at www.cml.lib.oh.us. The downtown main branch is worth a visit. It is one of the best public libraries in the country.

**PHYSICS DEPARTMENT**

**Paychecks:**
OSU uses direct deposit to pay all employees. To set up your direct deposit see the administration in the main office. OSU has gone to a paperless paystub/pay receipt system. The administration in the main office will give you the website to look up your paystub information (it is eprofile.osu.edu). You will use this site in concert with your student ID# to check your pay stubs online, get your W-2 and get any reimbursements from the department.

**Course Registration and Fees:**
You must register for courses at least 7 days prior to the start of classes to not be fined. If you are a pre-candidacy TA or RA you must be signed up for minimum 8 credits each for Autumn and Spring semesters and then Summer semester is 4 credits.

If you are a fellowship student, you must be signed up for 12 credits for Autumn and Spring and 6 credits for Summer. A Summer term department supported GRA for your first two years is contingent upon satisfactory academic and teaching performance.

If you have passed your candidacy exam (end of 2\textsuperscript{nd} year) and are on RA or on fellowship, you would sign up for 3 credit hours for each term. (TA support after the end of your second year is by petition and advisor request only. Also delaying taking candidacy beyond the beginning of Autumn term of the start of the 3\textsuperscript{rd} year will be by petition and advisor request only.)

The fees that you are required to pay each semester are the COTA bus fee ($13.50), Student Activities fee ($37.50), Recreational fee ($123), Student Union Fee ($74.40), General Graduate Fee ($184) and the Student Legal Fee paid in Autumn only ($40). These fees are taken out of your paycheck after taxes as a monthly deduction. Your health insurance single, domestic/international students ($38/month) is paid over 9 months and covers 12 months including summer term. Insurance is also taken out of your paycheck pre-tax.

**Taxes:**
Paychecks are subject to federal, state and city income tax. If you are a TA, appropriate amounts will be withheld for all three taxes. At the end of the year you only need to file tax returns for Federal and State tax. The City tax does not need to be filed if city tax is withheld. Tax forms are available by early February in Drackett Hall and in the main library.

If you are on a fellowship, you may have to pay estimated taxes quarterly to the federal, state and

Mailboxes:
Everyone has a mailbox in the main office (PRB 1040). You should check yours regularly since important information from the main office and teaching supervisors will be placed there. The address of Physics Research Building, 191 W. Woodruff Ave.; Columbus, OH 43210. Many students even send personal mail to the PRB so that the packages are well accounted for; feel free to do the same.

Photocopying and Supplies:
Photocopying can be done in the copy room (PRB 1132), on the 2nd floor lab side of the building just outside the north elevator, in Smith Lab on the 1st floor (room 1088), in the main office if you have access to your advisor's copy account, or on the 3rd floor near the bathrooms on the south end of the hallway.

Physics Graduate Student Shop (Basement Smith):
To be granted access to the student shop requires completing a training with Kent Ludwig who serves as one of the PRB building staff. Contact Kent for registration. Access is granted by adding your BuckID to an approved list for swipe access. The shop is open during the day but closed at night. You must have another person in the shop with you to use any of the power tools.

Computers:
The physics department maintains a number of computing facilities available for general use by physics graduate students. These facilities include Macintoshes, PCs, relatively new Linuxs, and various UNIX and VMS hosts, along with laser printers and scanners. Computers and printers for the grad students are located in rooms in PRB 3000 and PRB 3015. Many professors and research groups have additional computing facilities available for limited general use. Most machines have Internet access. It is very important for graduate students to maintain a computer account and to check e-mail regularly. Many important messages are conveyed electronically. For information on getting a physics department VMS and/or UNIX account, contact the Physics Computing Facility (PCF) in room PRB 1199.

OIT Provides each student with a University e-mail account at lastname.number@osu.edu which also acts as your internet username for things like online course registration and on campus wireless access. This account must be activated by you at OIT prior to use. You can establish the account online and forward e-mail from your OIT account to your physics department account by going to baker systems or visiting the OIT web page. OIT also has information on OSU’s public computing sites found outside the physics department. The department sends important notices by email. Please make sure the Physics Computing Services (PCS) staff have the correct email and any forwarding set up for you.

Courses:
Course listings, final exam schedules and other useful items are published each semester in the “Master Schedule of Classes.” A copy is always available online at www.ureg.ohio-state.edu. For physics department rules read your Graduate Student Handbook,
http://physics.ohio-state.edu/grad/GradHandbook.pdf. Remember that you can petition the Graduate Studies Committee to omit courses from the requirements.

**Advisor:**
Academic advisors can help you choose what classes to take, and advise you on filling your requirements. You generally don't need their assistance after the first year. Your research advisor then becomes the person who is in charge of your progress. Don't wait until the end of the Physics 7998 series to pick a research advisor. Summer research appointments are available - check your Graduate Studies Handbook for qualification requirements. You can always switch advisors if necessary.

**Annual Review:**
This review of your performance is very important; the Graduate Studies Committee reviews both your teaching and your academic progress. You are asked for input - use it to your advantage. List your accomplishments, and explain any shortcomings in a positive way. Once you are past your candidacy exam, you are required to meet with your committee once per year to present a plan of your current progress and what your plans for the future may be.

**Contract:**
During your employment as a GA you must sign a contract that states what the student is expected to do for their particular job. If you do not sign the contract, you will not be paid! Contracts are given yearly, or by the semester as needed.

**3rd Year GRA Policy:**
The physics department requires that students find a research assistant position by their third year. With only a few exceptions students will not be allowed to be a teaching assistant beyond their second year, and the stipend will be a reduced stipend from normal GTAs. This means that students must actively seek a group that has money to pay them by their third year at Ohio State. To find out more information on this policy please ask Dr. Pelz or the members of the PGSC.

**Study Habits, Study Aids:**
You might find it helpful to work in groups to get everything done especially in classes where they give a lot of homework. This is fine. However, you must be able to solve homework problems alone. After all, during exams you're alone, and few instructors allow handbooks to be used during exams. Some professors will allow you access to the CRC Math Handbook, Schaum's Outline Series Mathematical Handbook, Abramowitz and Stegun and Gradshteyn and Ryzhik, but again, this is rare on an exam. The Schaum's Mathematical Handbook (by Murray R. Spiegel, published by McGraw-Hill) is particularly useful. Keep it up-to-date by adding missing integrals and math formulas (no physics formulas). As a last resort, old homework solutions and solution manuals for many texts can be obtained from advanced graduate students. (Note that such materials should not be relied upon.)

**Qualifying Exam:**
A qualifying exam is not required. Instead you must take the core physics courses and maintain a minimum B+ average. It is possible to test out of the core courses. To do so please see the graduate chair, Dr. Jon Pelz.
Candidacy Exam:  
After finishing most of your course work you will take the Candidacy Exam which includes a written paper followed by an oral presentation. Graduate students are encouraged to take the exam during their second year. Delaying taking candidacy beyond the beginning of Autumn term of the start of the 3rd year will be by petition and advisor request only. More information is found on the main physics website (http://physics.osu.edu) under Current Graduate Students.

Committees:  
There are several ways in which you can become involved in the “government” of the physics department. Members of the following committees are elected by the graduate students each spring quarter.

PGSC: The functions of the PGSC are summarized on the first page of this guide. Seven graduate students serve a one year term on this committee. Other duties include assisting with open houses for prospective students, operating the elections for the various committees.(webpage: http://physics.ohio-state.edu/~pgsc )

CGS: The Council of Graduate Students is a university wide organization which has one representative and two alternates from the physics department. The council is an official sounding board for graduate student opinions. They also publish a newsletter called The Graduate Voice. The CGS meets several times each quarter, and any interested student may attend.

Graduate Studies: Three graduate students serve on the faculty Graduate Studies committee. This committee reviews the generalities of the graduate curriculum (required courses, exams, etc.) and makes decisions on the acceptance of graduate applicants.

Colloquium: Meet with professors on the colloquium committee to schedule speakers for the Tuesday departmental colloquia.

Climate and Diversity Committee: The department’s newest committee works to maintain and improve a professional and diverse community of scholars and staff. Two graduate students currently serve on it.

Service Courses: One graduate student serves on the committee. The committee overseas current issues and future changes to the introductory undergraduate physics courses (1200, 1201, 1250, 1251, 1260, 1261). As these are also the courses that TAs teach, the committee deals with all matters relating to TAs.

Safety and Infrastructure: One graduate student serves on the committee. The committee manages both the safety standards of the various labs on campus as well as overseas all maintenance and building organization for the Physics Research Building.
UNIVERSITY RESOURCES

Medical Matters:
The University offers a student health insurance plan. All students are required to have health insurance. International students are required to purchase OSU student health insurance. Unless you have better health insurance coverage through a spouse/parent, it is also recommended that domestic students have the student health insurance coverage as well since the university pays for 85% of the premium. The remainder of this payment will be taken directly out of your paycheck every month. If you have questions about adding your dependents then contact PGSC. The Wilce Health Center, located behind the RPAC Hall, is good for routine stuff: shots, stomach pain, etc. If you need more complicated care, the University Clinic or Hospital can provide it. Most prescriptions are $10 if you have the student health insurance plan.

There is also a dental school on campus. You can receive inexpensive dental care there, but remember that the care is given by supervised dental students. Dental services are also available at Wilce for a $15 copay. The Optometry School provides services to students. It is inexpensive, but you should compare prices around town before buying glasses or contact lenses, since this is a very competitive business. You can also see a supervised student optometrist at Wilce.

Sometimes the pressures of Graduate School can be difficult to cope with. The University provides free counseling on campus to help you cope. It is 100% confidential. Call 292-5766 for more information. If you are unable to get the help you need there, community resources are available also. The North Central Mental Health Services office at 1301 N. High (299-6600) has a 24 hour crisis service; it offers individual, marital, and family counseling, as well as treatment for alcohol and drug abuse. These services are available to anyone for a very low cost.

Legal
Unless you opt out, which we do not recommend you do, there is a student legal fee paid to the university. If you pay this fee then you are given access to Student Legal Services who has several staff attorneys who can help with a variety of issues including landlord/tenant disputes, criminal misdemeanors, and traffic offenses. They also offer a service to review lease agreements for you before you sign them. Their office is located at South Campus Gateway 20 E. 11th Ave. Columbus, OH 43201 and can be reached at(614) 247-5853 On their website: http://studentlegal.osu.edu/ they provide more information and have an online appointment request form.

Libraries:
OSU has a decentralized library system. This means that many of the books you will need can be found in the 18th Avenue Library (south of Smith Lab). William Oxley Thompson, the main library, is located at the west end of the Oval.

In order to discover which library has the book you need, see the library websites catalog (http://library.ohio-state.edu/). You can use this library to reserve books or order books to have mailed to the Physics Research Building, this includes books found at other universities (however, doing this will reduce the amount of time you can check out a book and may include large fines for late returns). As a staff member you can check out most books for 10 weeks but these can be recalled early if someone else needs them (Likewise, you can request a book that someone else has checked out). Library Reserve books can be checked out for 3 days, overnight,
or for only 2 hours (depending on the book), but they must be returned promptly or the fines can be large. Most journals can be taken out of the library for extended periods (up to several weeks) and most journals are now found online with free downloads on all journal articles. You may also request journal articles to be copied and sent to you as a pdf via Article Express. Pay attention to notices about overdue books; return or renew your books promptly to avoid owing fines. As there are occasional mistakes in the library system, it is wise to ask the librarian for a receipt when you return a book.

Churches:
Columbus has a variety of places to worship. Whether you're looking for a temple, synagogue or cathedral, look on Google. Most major denominations have a facility on or near campus.

Recreation:
Ohio State has excellent sports facilities. Recreation and Physical Activity Center (RPAC) contains 4 gyms, 4 pools, basketball and racquetball courts, weight rooms and tennis courts and a new indoor track. There are other recreation facilities including a climbing gym. See http://www.recsports.osu.edu/ for more information. There are exercise programs and departmental intramural sports teams. All these are free with your student I.D (paid for by your student fees).

The university also has a number of arts programs, including exhibitions, lectures and films at the Wexner Center, concerts at Mershon Auditorium, Department of Theatre productions at Drake Union and numerous other events during the year. Most performances are advertised in the Lanternt, but a College of Arts monthly calendar of events can be obtained at Mershon Auditorium. The university also offers hundreds of student organizations which you can join, ranging in diversity from the Ghana Friendship Union to the Ski Club.

The Department of Physics also provides social activities such as a department party in February and a spring picnic. There are many good parks in Columbus area.

Everything Else:
One of the best sources of information about University services and events is the OSU website.

COLUMBUS RESOURCES
Some of the many low-cost things to see and do in Columbus include (these are all on the city bus line) you also may be able to purchase discount tickets for some of these things through the student union http://ohiounion.osu.edu/things_to_do/dtix:
• Columbus Crew (Major League Soccer team)
• Columbus Clippers (Minor League Baseball team)
• Columbus Blue Jackets (Major League Hockey team)
• Columbus Zoo
• Wyandot Lake (water park)
• CAPA Summer Movie Series
• Columbus Museum of Art
• Ohio Historical Society
• Center of Science and Industry
• Franklin Park Conservatory
• Red, White & Boom (4th of July fireworks, usually held on July 3rd)
• The Ohio State Fair - August
• Greek Festival - Labor Day weekend
• Columbus City Parks
• Gallery Hop in the Short North - first Saturday of every month
• Oktoberfest
• Jazz and Rib Festival - July
• Columbus Metro Parks
• Ohio Union Activity Board (ohiounion.osu.edu/activityfee/ouab.asp)
• and many other community festivals and events

OTHER MAJOR ATTRACTIONS IN AND AROUND OHIO
You'll need a car for these:
• Cincinnati (about 1 1/2 hours away):
  o Bengals (Football)
  o Reds (baseball)
  o Mason-Dixon Line (bunches of Civil War museums, grand old houses)
  o King's Island (amusement park)
  o Cincinnati Zoo
  o Cincinnati Aquarium (located just across the river in Kentucky)
  o IKEA
• Cleveland (about 2 hours away):
  o Indians (baseball)
  o Cavaliers (basketball)
  o Rock and Roll Hall of Fame
  o Cleveland Zoo
  o Six Flags (amusement park)
  o Browns (football)
• Dayton (1 1/2 hours away):
  o Wright/Patterson Air Force Base
  o Air Force Museum
• Indianapolis (about 3 hours away):
  o Colts (football)
• Pittsburgh (about 3 hours away):
  o Steelers (football)
  o Penguins (hockey)
  o Pirates (baseball)
  o typical large city attractions
• Cedar Point (amusement park, best one in the world!) (2 hours away)
• Hocking Hills State Park (great hiking) (1 hour away; Rt. 33 between Columbus and Athens)