Hitchhiker’s Guide

To the

Galaxy CSU Physics Department

June 2011
Colorado State University
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Acknowledgements

This guide was written by Shannon Woods (the 2007-2008 graduate student representative for the physics department) with a lot of help from other people, especially Robbie Merrill and Professor Eykholt. It was inspired in part by the “Hitchhiker’s Guide to Life, the Universe, and Everything” (written by other physics graduate students in the late 1980’s). It was gently revised in June 2011 by Steve Lundeen. If you have any comments or suggestions, feel free to e-mail him at lundeen@lamar.colostate.edu.
Introduction

Disclaimer
What you have in front of you is an informal guide to being a graduate student in the Physics Department at Colorado State University. In other words, this is not official in any way and “but the guide said …” will not help you any. I try to cite official looking sources when possible, but the information contained within this guide may be out of date by the time you read it. My intention, with the help of many other people, was to create a guide that pulls together all the information that you need or are expected to know. Some of it can be found online, while some of it cannot, and some of it you may not even think to look for. When in doubt, ask other graduate students … they have done what you are going through and might even have some answers.

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Moving to Fort Collins

On-campus

http://www.housing.colostate.edu

Information on this site includes a description of the four different apartment complexes, rental rates, and an online application.

To qualify as an Apartment Life resident you must (from the Housing website):

1. **Be a CSU graduate student enrolled in at least one credit hour or continuous registration.** Students do not have to be registered for summer classes, but must be pre-registered for the following fall semester.

2. **Be a CSU faculty or staff member.** Faculty and staff residents are required to be full time employees, post-doctoral fellows, or visiting faculty. Faculty and staff may live in the apartments if space is available after all students have been placed.

Off-campus

CSU’s Off-Campus Student Services website:  http://www.ocssral.colostate.edu. If you have your eID and ePassword, you can go to their online rental listings, log on, and look at a listing of currently available apartments, houses, studios, etc. Under “housing options” they also have a list that compares many apartment complexes. The site has many other resources like a guide to renting and eviction information. Note that in Fort Collins; no more than three unrelated individuals may reside in the same dwelling unit. There are a few apartment complexes that can have a maximum of four roommates. For more information, go to the website and look under “occupancy limits”.

Utilities

In general, you probably want to have electricity and gas before you move in (some places may require it). Keep in mind that different apartment complexes may cover some utilities as part of your rent.

- City of Fort Collins   electricity, water, sewage   (970) 212-2900
- Qwest                phone, broadband       (800) 244-1111
- Xcel Public Services gas               (800) 895-4999
- Comcast             cable, internet      (888) 404-9200
Transportation

Fort Collins has a transportation website located at http://www.fcgov.com/transportation, which includes information about the Transfort bus service (public bus system for Fort Collins), bicycling, parking, and current construction.

Car: If you want to park on campus, you will need a parking permit. The Parking Services website includes information about parking permit fees and where to park: http://parking.colostate.edu. For the commuter student, the current cost is $188/year. These fees are projected to increase EACH OF in the next few years.

Bus: Maps are available online and at the CSU Transit Center in the Lory Student Center. All full-time, fee paying CSU students can get a bus pass at the CSU transit center. Note that the buses usually stop running after 6:00 pm.

Bike: If you choose to ride your bike on campus, you must pay $10 to register it with the CSU Police Department: http://police.colostate.edu/BikeRegistration.htm.
Before the Semester Begins

Getting on the payroll

In order to get on the payroll, you need to establish both Identity and Employment Eligibility. A few ways to do this include:

- U.S. Passport
- Unexpired foreign passport *with* I-551 stamp *or* attached Form I-94 indicating unexpired employment authorization
- State Driver’s License or ID *with* U.S. Social Security card (valid for employment)
- State Driver’s License or ID *with* an original or certified copy of a birth certificate issued by a state, county, municipal authority, or outlying possession of the U.S. bearing an official seal


Getting an eID

Every new student needs to have an eID.

Registering for Classes

RAMweb is part of the student portal RAMPoint: [https://rampoint.colostate.edu/](https://rampoint.colostate.edu/).

Once you have your eID, you can log onto to RAMweb. In order to register for a course, you need the Course Reference Number (CRN) which can be found under class schedule. You must register for at least one credit before the semester begins. At RAMweb you will also find financial information and records.

Getting an ID card

You must be admitted and enrolled for the current semester before getting an ID card. The RamCard office is located in the Lory Student Center. Cards cost $18, which will be charged to your account and paid along with the other student fees. You must have a passport, driver’s license, state ID, or military ID with you to get a card.

Colorado Residency (U.S. Students only)

Tuition rates for Colorado residents are about 50% of the non-resident rates. The department expects all U.S. students to take the steps necessary to qualify for this lower
tuition rate by the earliest possible date. This requires certain steps to be taken before the
beginning of classes. See the section on Colorado Residency for details.

Health Insurance    http://graduateschool.colostate.edu/index.asp?url=health_ins
All new, incoming full-fee paying resident-instruction graduate students will be required
to enroll in the CSU student health insurance plan or to opt-out by demonstrating health
insurance coverage at a comparable level.

Directory (Public) Information    http://www.colostate.edu/Dept/Registrar/records.htm
Current address and phone, major, class level, dates of attendance, anticipated graduation
date and expected award, degrees awarded, and honors awarded are all considered
directory (public) information. This information may be released on request unless the
student has signed a FERPA Release Form restricting all or some of it.

** If you wish to have your information withheld from the public, you need to fill out the
Buckley form: http://www.colostate.edu/Depts/Registrar/buckley.pdf
Colorado Residency

The physics department really wants you to get residency if you are from another state because it is much cheaper for the department (for a TA) or your advisor (for a RA). Tuition for a non-resident is $9510.75/semester, but only $3717/semester for a resident (assuming 15 credits). Unfortunately international students are not eligible for Colorado residency.

In order to qualify as a Colorado resident for tuition purposes, you must present proof of your physical presence in Colorado for a period of 12 months prior to the beginning of the semester whose fees are at issue, and of your intent to make Colorado your permanent home during this same period. Among other things, this means you must obtain a Colorado drivers license, register your car (if you have one) in Colorado, register to vote in Colorado, and change your permanent address to your Colorado address everywhere it occurs. All of these things must be accomplished before the first day of classes 12 months before you want to achieve resident status. When they are complete, you will have begun your 12 month period of "domicile". There are a number of other factors that could disqualify your petition, including tax issues, but these are not so time critical.

As you approach the end of your 12 month domicile period, you should attend an Orientation Session to prepare you to submit a "Petition for In-State Tuition Classification". Wendy Gleason will advise you when these Orientation Sessions are scheduled, and help you to fill out and submit the petitions.

Qualified Person

From the SFS website:

A “qualified person” is a person who is eligible to establish their own domicile in Colorado for tuition classification purposes and is considered to be at least one of the following:

- an adult (a person least 22 years of age at the beginning of the 12-month domicile period)
- a graduate student
- an emancipated minor
- a parent or court-appointed legal guardian for a student who is under 23 years of age
A student must be a qualified person before he/she can establish a domicile separate from the domicile of their parent or legal guardian.

Domicile Year http://sfs.colostate.edu/I25010.cfm

You need to be here for a certain length of time before you can apply for residency.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Domicile Year</th>
<th>Petition Deadline</th>
</tr>
</thead>
</table>

You must get your driver’s license or ID card, and register to vote before the domicile year starts. Note that the beginning of the domicile year is different than the beginning of the semester.

Evidence of Intent to Establish a Domicile in CO http://sfs.colostate.edu/I29000.cfm

From the SFS website:

Your evidence of intent to be a resident of Colorado is demonstrated by the absence of ties to your former state of residence. Actions used to indicate intent must be accomplished at the beginning of and maintained throughout the domicile year. If implementation of these steps is delayed, the start of your one-year domicile period may be delayed. Evidence of intent must be demonstrated for one full year before resident status may be granted. It is the responsibility of the individual to provide as much information and documentation as appropriate to document intent. Several factors which are specified by law that will be considered as evidence of intent are:

- Colorado driver's license or valid Colorado ID
- Colorado motor vehicle registration
- Permanent, full-time, off-campus employment
- Colorado voter registration
- Change in permanent address on all pertinent records
- Payment of Colorado state income taxes as a resident
- Withholding of Colorado state taxes from wages
- Ownership of residential real property in Colorado
- Additional documents, as requested

The following are several factors specified by law that are considered evidence of domicile outside of Colorado:

- Failure to pay Colorado state income tax (if your income is sufficient to be required to do so) Filing a nonresident Colorado tax return is persuasive evidence of domicile outside Colorado
- Failure to comply with any Colorado laws imposed on Colorado residents.
- Maintenance of a home in another state
- Prolonged absence from Colorado
- Vehicle registration in another state
• Residing in another state when not enrolled as a student or between academic sessions
• Any other factor peculiar to the individual which tend to establish the act that his permanent home is in another state

Note: Because a domicile is defined as true fixed and permanent home, individuals who are physically present in Colorado only on a temporary basis or here for only school purposes cannot establish a domicile merely by taking the above actions.

Although the SFS website does not say it specifically, you also want to make sure that your parent/guardian does not claim you as a dependent on their income tax return.

Some of the Additional Documents needed

Give only copies of your documents, because they will keep everything on file.

• Leases, rent receipts, or notarized letter from landlord
• Certificate of Registration or Voter Registration card
• CO driver’s license or ID card
• CO vehicle registration
• First and last pay stub, letter from employer, or employment record
• Signed and complete copies of first two pages of Federal Income tax return for last two years
• Signed and complete copies of any state returns from last two years

Some notes about the documents that they want:

• They seem to want the leases that cover the entire domicile year.
• For the CO tax return, you will have to fill out the 104PN (part-year resident/nonresident tax calculation schedule). You will have to fill out the Tax Liability form if the printout does not include the dates that you were in CO. To do this you need to call the Colorado Department of Revenue at 970-494-9805 and tell them your name, SSN, and the date that you arrived. You can either pick up the form from them or have it faxed to you. The Physics Department fax number is 970-491-7947 and you can use it for department related business.
• More information regarding vehicle registration can be found here: http://www.larimer.org/motorv. You will have to go to a licensed dealer, a licensed inspection station or a law enforcement officer to have a Verification of Vehicle Identification form filled out before going down to the courthouse to register. There is no specific deadline for registering your car (who is to say when you actually got one?), but sooner is better. Other forms that you will need
include the title from the other state, proof of insurance, and bill of sale. Also note that you will need to pay the registration fee with cash or a check. On this website there is a way to estimate the fee that you will have to pay. It will probably be at least $100.

**Colorado Department of Motor Vehicles (DMV)**

You will need to go to the DMV to

a) get a CO driver’s license or ID card

b) register to vote.

c) transfer the registration on your vehicle (if any)

Information regarding documents that you need to bring can be found here: http://www.revenue.state.co.us/mv_dir/formspdf/DR_2300_ID_Requirements.pdf.

People have had problems with DMV not accepting municipal birth certificates.

**DMV Hours and Locations**

M-F: 8 am. - 5 pm.

1121 W. Prospect Road, 80526

(970) 494-9804
Money

We get paid at the end of every month. If the last day falls on a weekend, then we typically get paid the Friday before. As a TA, you will get paid for half of August and then for half of May. Although the department pays for tuition, it does not pay for fees. The payment deadlines are as follows:

<table>
<thead>
<tr>
<th>Charges</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Fees / Insurance</td>
<td>August 10</td>
<td>February 10</td>
<td>June 10</td>
</tr>
</tbody>
</table>

Due dates are on the 10th of the month, unless it falls on a weekend or holiday. If the balance is not paid by the due date students will incur a 1.5% late penalty charge and a transcript hold. The balance will need to be paid before you register for the next term. For 2010/2011, you will have to pay $864.40 per semester in fees (assuming 15 credits). The Registrar’s website includes a breakdown of costs and where your money is going: http://www.colostate.edu/Depts/Registrar/tuitiongraduate.html.

Some Warnings

- The physics department will not pay the tuition before the deadline, they will wait until after the add/drop date.
- There is a 2.25% convenience fee plus a $0.75 per transaction fee charged for all credit cards used to pay any amount towards a student’s University student account.
- You will not receive paper bills.
- June paychecks are delayed and not paid until the first working day of July.
Classes and Degree Requirements

The “typical” student schedule looks like the following:

<table>
<thead>
<tr>
<th>1st Fall</th>
<th>1st Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH 571</td>
<td>Math Methods I 3</td>
</tr>
<tr>
<td>PH 651</td>
<td>Quantum Mechanics I 3</td>
</tr>
<tr>
<td>PH 621</td>
<td>Classical Mechanics 3</td>
</tr>
<tr>
<td>PH 692</td>
<td>Seminar 1</td>
</tr>
<tr>
<td>PH 784</td>
<td>Teaching 5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Fall</th>
<th>2nd Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH 641</td>
<td>Electromagnetism I 3</td>
</tr>
<tr>
<td>PH 671</td>
<td>Statistical Mechanics 3</td>
</tr>
<tr>
<td>PH 693</td>
<td>Current Topics in Physics 3</td>
</tr>
<tr>
<td>PH 692</td>
<td>Seminar 1</td>
</tr>
<tr>
<td>PH 784</td>
<td>Teaching 5</td>
</tr>
</tbody>
</table>

3rd year and on

RA: decided between you and your advisor.

TA: need at least 15 credits, but they do not have to be all teaching credits.

Graduate School [http://graduateschool.colostate.edu/](http://graduateschool.colostate.edu/)

The graduate school website includes the forms that you will need to fill out, deadlines, and a lot of other information. Here is a summary of some of it.

GPAs that must be above a 3.0

1. Overall for your entire time here.
2. Classroom courses (not teaching, seminar, or research).
3. Eight core courses (571, 572, 621, 641, 642, 651, 652, and 671).
4. Overall for credits listed on your GS 6.
5. Classroom courses listed on your GS 6.

Some Warnings

- In addition to keeping the different GPAs above a 3.0, each course grade must be a C or better.
- If GPAs 1 or 2 drop below a 3.0, and you have taken 12 classroom courses or been here for two semesters, you will lose your TA and be put on academic probation.
- The graduate school will not give you your degree if any of the above GPAs are below a 3.0 at the end of the semester that you plan to receive the degree.
- GPA 3 is a physics department requirement.
- Electives include Solid State, Lasers, Particle Physics, Semiconductors, etc. It is not guaranteed that each elective will be offered each year.
- A course may be dropped before the semester begins if there is insufficient enrollment (typically less than five students).
- There is a ten-year time limit for completion of the master’s or doctoral degrees.
- There is a $50 late registration fee for adding 1st class on or after the first day of the semester.
- The add/drop deadline is typically two weeks after the first day of the semester.
- You must fill out a form from the physics office to sign up for PH 693 or research. You might need to remind your instructor to give you a grade at the end of the semester.

Research
PH 799 – Research towards a Ph.D. dissertation
PH 699 – Research towards an M.S. thesis
PH 698 – Research that will not be used for either a Ph.D. dissertation or a M.S. thesis

Degree Programs  http://www.physics.colostate.edu/GraduateInfo/facts

Master of Science - Non-Thesis Option : 32 credits
21 credits  classroom courses at the 500 level or higher
3 credits  classroom course > 500 or PH 693
2 credits  seminar (PH 692)
6 credits  anything at the 500 level or higher except research

Doctor of Philosophy:  72 credits
24 credits  PH 571, PH 572, PH 621, PH 641, PH 642, PH 651, PH 652, and PH 671
4 credits  seminar (PH 692)
6 credits  electives > 500 (not PH 541 or PH 551)
38 credits  anything at the 500 level or higher

The Bulletin states that more than 30 credits may be transferred from the master’s program to the Ph.D. program if you are in a continuous Master’s/PhD. program at CSU. It is recommended, however, that students limit the number of credits that they put on the
M.S. GS6 to the minimum (32 credits). For the non-thesis option, you would want at least two of the credits to be disposable (like teaching credits).

Working for another department
You can sign up for PH 693/PH 698/PH 699/PH 799 with a faculty member in another department. That faculty member can serve as the instructor and assign the grade. However, you will still need to have an advisor within the Physics Department. The instructor will need to go to the Physics Office at the end of the semester to assign a grade. Working outside the department means that you are MUCH less likely to get a TA.

Forms to fill out
GS6 – Program of Study – Declares your advisor/committee and the courses that you plan on taking to fulfill the degree requirements. If you fail a course that you have put on this form, you cannot substitute it with another. The following page is the checklist that the graduate school uses for the GS6 (it is not available online).

GS7 – Request for Change of Department and/or Degree Program – In general, all physics students are admitted under the Ph.D. program. If you want a Master’s, you need to fill out this form. The benefit of being in the Ph.D. program first is that you have more time to declare your program of study. You do not want to fill out this form too early because after you do, you will quickly have to fill out the GS6 form for your Master’s.

GS24 – Report of Final Examination Results – Your committee members vote to decide whether you have passed your exam. It must be turned in no more than 48 hours after you have taken your exam.

GS25 – Application for Graduation – Declares which semester you wish to graduate. It is also used to make changes to the GS6.
DATE: 

DEPARTMENT: 

RE: 

FROM: Ruth Parker, Graduate School – 204 Student Services Bldg.

Approval of GS6/GS9A is being delayed for the reason indicated below. Please make necessary corrections and return as soon as possible. **Course changes made to the GS6 should be initialed by the adviser.** If questions, please contact me at (970) 491-6817. Thank you.

1. Thirty credits is the minimum required for a master’s degree. A minimum of 24 credits (32 for the MFA degree) must be earned at Colorado State University, 21 of which must be earned after admission to the Graduate School.

   At least 16 of the credits earned at Colorado State must be in 500 or higher level courses; of the 16, at least 12 must be in regular courses.

2. Seventy-two credits is the minimum required for a PhD. A minimum of 32 credits must be earned at Colorado State University after admission to the doctoral program.

3. If a master’s degree is to be used as part of a PhD program, please complete the appropriate section on the GS 6.

4. Signature is needed: _____ Adviser/Co-Adviser _____ Student _____ Department Head

5. Official transcript showing bachelor’s/master’s degree must be submitted.

6. Official transcript showing credits to be transferred must be submitted.

7. Please have registrar send verification that the transfer credits are graduate level courses.

8. Graduate credit is not granted for completion of courses numbered at the 100 and 200 level.

9. A masters committee requires 3 members: 1 departmental adviser, 1 other department member, 1 outside member.

10. A PhD committee requires 4 members: 1 departmental adviser, 1 other department member, 1 outside member, 1 additional member from either inside or outside the department.

11. The Human Resource Services records do not show a current Joint Appointment / Faculty Affiliate Appointment for 

12. Please provide Social Security Number or alternate University assigned identification number for all committee members.

13. Course(s) not excluded from Undergraduate degree.

14. Course(s) taken prior to Admission must have a “B” or better grade.

15. Submit GS7, Request for change of Department and/or Degree Program.

16. OTHER:

________________________

________________________

________________________
**General deadlines**

Before 2\textsuperscript{nd} spring: GS7 and GS6 for Master’s

During 2\textsuperscript{nd} spring: Master’s Thesis Defense \textit{or} Journal Presentation Exam

Before 3\textsuperscript{rd} fall: GS6 for Ph.D. (and possibly GS 7)

During 3\textsuperscript{rd} spring: Research Certification Exam (Preliminary Exam)

- Specific deadlines for the GS 24 and GS 25 can be found at the graduate school website.
- A minimum of six months must pass after the Research Certification Exam before you can defend your thesis.
- When you fill out your GS7 to switch from Master’s to Ph.D., there is an option for “Master’s continuing on to Ph.D.” If you check this, the graduate school should automatically switch you back to a Ph.D. once you get your Master’s but you should always double-check that they actually do it.
- The research certification exam is when you declare your Ph.D. topic. Your committee members decide whether you can proceed or not.
Foreign Students

Because things vary based on what country you come from and what visa you have, it is difficult to have a guide that covers everything. However, here are some things to keep in mind:

- You should have an unexpired foreign passport with the Form I-94.
- Go to the International Office with your passport, I-94 and offer letter.
- Obtain a letter from the International Office stating that you are a CSU student and will be working as a TA.
- Open a bank account in Fort Collins.
- As an international student you are required to have health insurance, this can be done at the Hartshorn Health office on campus.
- Check in with the physics office and bring your passport.
- Meet with your advisor to discuss classes and other things that are expected of you.
- Get an eID if you have not already done so. International Student and Scholar Services (includes forms, tax information, and other resources):
  http://wsprod.colostate.edu/cwis30/2007/ISSS/index.asp
Campus and Beyond

http://www.map.colostate.edu

Engineering Building: where you are going to spend a lot of time … if you lock yourself out of your office, only Professors Eykholt and Robinson have the keys to let you in.

Lory Student Center: food, University Club, food, transit center, food, bookstore

http://www.sc.colostate.edu

http://www.uclub.colostate.edu (for faculty/staff/grad students/alumni)

http://www.bookstore.colostate.edu

Morgan Library: where the books live http://lib.colostate.edu

Hartshorn Health Center: many services available http://hartshorn.colostate.edu

Admin Annex/Student Services: registrar, financial services, etc.

McGraw Athletic Center: basketball, tennis, swimming pool, lots of equipment

CSU also maintains an events calendar (http://events.colostate.edu) that includes academic deadlines and University holidays. There are also links to athletic events and music/theater/dance performances.