

# Physics 225 Intro to Computational Physics and Programming Fall 2023

- This is a physics course not a computer science course so it isn't a course in programming. This is a course in using computers and other similar things to do physics; programming is part of that but not all. Over the course of the semester the goal is that you are comfortable figuring out various and hopefully good (might mean fast, robust, rotten but fast to create and works, totally silly or stupid but works,...) , ways to solve problems that are complex. Those solutions can take multiple forms, and some will be computer programs.
- My hope is that the course is fun at most of the time and that you are more comfortable with doing forms of computational physics or modeling by the end of the term.
- The academic demands in this course and your other classes can be understandably difficult. It is normal to feel anxious about your academic ability, especially when unexpected life events emerge. I want to invite you to connect with me about any difficulties you have in this course as soon as possible. Your success is important. I want you to get the additional assistance needed before the challenges become too much. **DON'T WAIT** to get help. Asking before you really need it is a great plan. This course should not add to any of your stress, it is designed to be a team effort in a lot of ways.
- Instructor: Dr. Dawn Hollenbeck
  - ▷ Email: dmhsps@rit.edu
  - ▷ Office hours (Subject to change but I'll let you know): Monday 3:00-4:30 pm, Wednesday 3:00-4:30 pm, Friday 9:30-11 am, and other times by appointment. I will also try to post some times on StarFish. Along with most of the time when my door is open.
  - ▷ Office: (CAR) 76-1264
  - ▷ Phone: 585-475-6652 (but don't call it unless you really have to because I avoid answering it.)
- Computers: If you have a laptop or tablet you might want to bring it so you can use that instead of one of the machines we have. You do not need bring your personal machine but there is something to say for familiarity. Your computer doesn't need extra special stuff if you can get on the internet it should be ok. There are NO GAMES allowed unless I've approved or arranged for them.
- Attendance and Participation:
  - ▷ I expect you to show up to class when possible.
  - ▷ I expect you to engage in discussions and tasks in a respectful manner.
  - ▷ If you are sick please do not come to class. While I value sharing, I don't value sharing germs. And I think everyone else likely feels the same.
  - ▷ If you are sick or going to miss class for any reason just let me know. You don't have to give me a reason but I do actually worry about all of you.
  - ▷ I will do by best to make sure everything is kept as light as possible. Seriousness can be overrated. That doesn't mean class is playtime but learning is supposed to be fun. At times hopefully it will feel more like play than work.
  - ▷ Silence your cell phones or other electronic devices that make noise. We don't want to listen to your ring tone.
  - ▷ No games, TV, movies, social media, or other non-class related stuff on your phone or tablet or otherwise. If you are lucky we will just pick on you, that is if you are lucky. Seriously, you need to focus on the class.
  - ▷ If you need to take or make a call, that is ok just go in the hall to do it.
  - ▷ If you need to leave for any reason, it is ok. The only rule is to not make a scene if possible.
- Food and drink: There is no food or drink in the workshop room. You can seal up your stuff and store it in your bag or it goes out in the hall. I don't care if how you feel about it, this class isn't a democracy. I shouldn't have to repeat myself so get it stuck in your head,
- Grading:
  - ▷ Labs: 65%
  - ▷ Final project: 20%
  - ▷ Attendance and other odd bits (includes being respectful): 15% [free points if you show up, try to avoid being a jerk, and follow instructions.]

- Labs:

- ▷ The goal is that you should be able to finish most of the labs in lab. However, there will be some stuff you need or should do at home.
- ▷ What you submit for you lab assignments need to make sense.
- ▷ Please don't submit a computer program that is bonkers. Basically, you don't need to show off just to show off. Simple is better most of the time.
- ▷ You need to follow the instructions best you can.
- ▷ You are encouraged to discuss and work with your classmates but you need to really engage and submit your own work.
- ▷ Not all labs will be done on the computer. Computational physics includes more than computers.

- Rough Letter Grades:

- ▷ 90-100: A- to A
- ▷ 80-89: B- to B+
- ▷ 70-79: C- to C+
- ▷ 60-69: D
- ▷ <60: F

- Being respectful:

All members of the RIT community are expected to be respectful to contribute to a positive learning environment. Everyone should feel welcome in our class. No one should be made to feel as though they do not belong and be respectful. Be courteous to each other and if someone says that your words or behavior are unwelcome, then please respect those wishes. If someone else is offended at your words or actions, then you need to stop and use it as a learning experience. Everyone is a jerk at times but the goal is to actively try not to be.

- Policy Prohibiting Discrimination and Harassment/Title IX Reporting:

RIT is committed to providing a safe learning environment, free of harassment and discrimination as articulated in our university policies located on our governance website (<https://www.rit.edu/academicaffairs/policiesmanual/c060>.) RITs policies require faculty to share information about incidents of gender based discrimination and harassment with RITs Title IX coordinator or deputy coordinators, regardless whether the incidents are stated to them in person or shared by students as part of their coursework.

If you have a concern related to gender-based discrimination and/or harassment and prefer to have a confidential discussion, assistance is available from one of RITs confidential resources on campus (listed below).

1. The Center for Women & Gender: Campus Center Room 1760; 585-475-7464; CARES (available 24 hours/7 days a week) Call or text 585-295-3533.
2. RIT Student Health Center August Health Center/1st floor; 585-475-2255.
3. RIT Counseling Center - August Health Center /2nd floor - 2100; 585-475-2261.
4. The Ombuds Office Student Auxiliary Union/Room 1114; 585-475-7200 or 585-475-2876.
5. The Center for Religious Life Schmitt Interfaith Center/Rm1400; 585-475-2137.
6. NTID Counseling & Academic Advising Services 2nd Floor Lynden B. Johnson; 585-475-6468 (v), 585-286-4070 (vp).

- Academic Integrity Statement:

As an institution of higher learning, RIT expects students to behave honestly and ethically at all times, especially when submitting work for evaluation in conjunction with any course or degree requirement. The School of Physics and Astronomy encourages all students to become familiar with the RIT Honor Code and with RITs Academic Honesty Policy.

- Statement on Reasonable Accommodations:

The Statement on Reasonable Accommodations is required in your syllabus according to this memo. The required text is: RIT is committed to providing reasonable accommodations to students with disabilities. If you would like to request accommodations such as special seating or testing modifications due to a disability, please contact the Disability Services Office. It is located in the Student Alumni Union, Room 1150; the Web site is [www.rit.edu/dso](http://www.rit.edu/dso). After you receive accommodation approval, it is imperative that you see me during office hours so that we can work out whatever arrangement is necessary.