

**Physics Today 1 (see also Class Schedule)**  
**PHYS 122 Fall 2020**  
**Wednesdays, 3:30 pm – 5:20 pm CW224 (new room)**

**Instructor [this class is face-to-face]**

**Name:** Mick O'Shea

**Title:** Professor, Department of Physics

**email:** [mjoshea@phys.ksu.edu](mailto:mjoshea@phys.ksu.edu)

**Office and Office Hours:** CW106, Tues, Wed 8:30 – 10:30 a.m. (starting 2nd week of semester)

**Course Objectives:**

- To learn important aspects of being a physics major – and ultimately a physicist. These include
  - How & when to apply for scholarships, internships, etc.
  - The importance of diversity and inclusivity to progress in the field of physics
  - What sorts of job opportunities await you once you've earned your degree in physics
- Look at how experiments elucidate the laws of physics.
- Teach you a useful programming language, that you can then use throughout your physics curriculum here, and beyond. We will focus on the Python language.

**Prerequisite(s):** This is a K-State First Seminar and is reserved for freshman and incoming transfer students only. Physics majors only.

**Course Activities:**

The class activities will be comprised of the following:

1. **Computational skills** – Computational skills are essential to modern-day physicists and are highly valued among potential employers in industry, research labs and academia. You will learn the Python programming language and, using this language, you will learn basic programming skills. It will be very helpful for you to use a laptop in class and you are encouraged to bring your laptop to class starting with the second class. Computers (with Python uploaded) are also available in CW038.
2. **Investigation of Physics Careers** – You will receive a general introduction to the numerous careers available to physicists. *You will be required to write a paper on a physics career outside of academia.* You will also learn about the importance of diversity and inclusivity to progress in physics. Finally, you will learn about scholarship and internship possibilities that exist for physics majors.

**Assessments and Grades**

Attendance and participation in discussion (miss up to 2 classes)	40%
Programming Assignments	40%
Paper Assignment ( <i>physics career outside of academia</i> )	20%

Grade dividing lines: A: 90%, B:80%, C:70%, D:60%, F: below 60%.

**If you cannot attend class and still want credit** – you must e-mail the instructor [mjoshea@phys.ksu.edu](mailto:mjoshea@phys.ksu.edu) **by 5:00 p.m. Wednesday (class day)** with the reason for absence. If you are ill you are strongly encouraged not to attend class. The instructor will then send you an assignment to complete (**due the following Monday by 5:00 p.m.**).

### **1. Statement Regarding Academic Honesty**

Kansas State University has an Honor and Integrity System based on personal integrity, which is presumed to be sufficient assurance that, in academic matters, one's work is performed honestly and without unauthorized assistance. Undergraduate and graduate students, by registration, acknowledge the jurisdiction of the Honor and Integrity System. The policies and procedures of the Honor and Integrity System apply to all full and part-time students enrolled in undergraduate and graduate courses on-campus, off-campus, and via distance learning. A component vital to the Honor and Integrity System is the inclusion of the Honor Pledge which applies to all assignments, examinations, or other course work undertaken by students. The Honor Pledge is implied, whether or not it is stated: "On my honor, as a student, I have neither given nor received unauthorized aid on this academic work." A grade of XF can result from a breach of academic honesty. The F indicates failure in the course; the X indicates the reason is an Honor Pledge violation.

### **2. Statement Regarding Students with Disabilities**

Students with disabilities who need classroom accommodations, access to technology, or information about emergency building/campus evacuation processes should contact the Student Access Center and/or their instructor. Services are available to students with a wide range of disabilities including, but not limited to, physical disabilities, medical conditions, learning disabilities, attention deficit disorder, depression, and anxiety. If you are a student enrolled in campus/online courses through the Manhattan or Olathe campuses, contact the Student Access Center at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu), 785-532-6441; for K-State Polytechnic campus, contact Julie Rowe, Diversity, Inclusion and Access Coordinator, at [jarowe@ksu.edu](mailto:jarowe@ksu.edu) or call 785-826-2971.

### **3. Statement Defining Expectations for Classroom Conduct**

All student activities in the University, including this course, are governed by the Student Judicial Conduct Code as outlined in the Student Governing Association By Laws, Article V, Section 3, number 2. Students who engage in behavior that disrupts the learning environment may be asked to leave the class.

### **4. Statement Regarding Wearing of Face Coverings**

To protect the health and safety of the K-State community, students, faculty, staff and visitors must wear face coverings over their mouths and noses while on K-State campuses in all hallways, public spaces, classrooms and other common areas of campus buildings, and when in offices or other work spaces or outdoor settings when 6-foot social distancing cannot be maintained. In addition, all students, faculty, and staff are required to take the COVID-19 and Face Mask Safety training. Employees who need reasonable accommodations and assistance related to required face coverings may contact the ADA coordinator at [charlott@k-state.edu](mailto:charlott@k-state.edu), and students needing accommodations may contact the Student Access Center at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu).

In classrooms, faculty have the right to deny a student entry into the room if the student is not wearing a face covering. Students not wearing a face covering will be reminded to do so and offered a clean face covering, if one is available. If the student does not comply, the faculty member will ask the student to leave the space, and if available, join the class remotely. As a last resort, campus police will be called. The faculty members will complete the Code of Conduct form and the Office of Student Life will look further into the issue and take the non-compliance with the request to leave into consideration of further accountability measures.

At no point should the professor or other students put themselves into an unsafe situation while attempting to enforce the face-covering policy. Manhattan campus police: 785-532-6412