

**Course:** PHY 101      **Course Title:** Physics by Inquiry for Educators  
**Credit Hours:** 4      **Department:** Physics, Astronomy, & Materials Science  
**Prerequisite:** open only to Early Childhood, Elementary, Middle School, and Special Education majors.

**CORE-42 Category:** NATURAL SCIENCES - Physics: Essentials in Physics with Lab (Science Teacher Education)

**MOTR PHYS 100LT**      **MOTR Hours:** 4

---

*Information submitted by a department representative on 4/30/2021 3:33:28 PM – Compiled by Darren Wienberg, Academic Advising & Transfer Center*

**Typically Offered During:**

|                       |     |                               |    |                               |    |
|-----------------------|-----|-------------------------------|----|-------------------------------|----|
| Fall Full Semester:   | YES | Fall 1 <sup>st</sup> Block:   | NO | Fall 2 <sup>nd</sup> Block:   | NO |
| Spring Full Semester: | YES | Spring 1 <sup>st</sup> Block: | NO | Spring 2 <sup>nd</sup> Block: | NO |
| Summer:               | NO  |                               |    |                               |    |

**Typical Instructional Modality:**

|                       |     |                 |     |           |    |
|-----------------------|-----|-----------------|-----|-----------|----|
| Traditional (seated): | YES | Blended:        | YES | Internet: | NO |
| Online Video:         | NO  | Web Conference: | NO  |           |    |

**May Also Count Toward Department Offering:**

|        |    |        |    |              |    |
|--------|----|--------|----|--------------|----|
| Major: | NO | Minor: | NO | Certificate: | NO |
|--------|----|--------|----|--------------|----|

*Please see online published semester class schedule and undergraduate catalog for detailed course offering information.*

---

***How do you describe the course to students when they ask “What is this class about?” (Without using the catalog description)?***

Physics is the science which describes how things in our world interact. This course is a requirement in elementary education, middle school science education and special education programs and is closed to other students. If interested in physics but not an educator, consider PHY100 (general science), PHY123, or PHY203 for a general physics course.

***Beyond meeting a General Education requirement, what benefits can students realize from choosing this course?***

We will not only learn about physics as a science but also have discussions on bringing science into the classroom that educators may use in their future career. Because this course is part of the general science curriculum for future educators, we will explore to other science disciplines and connections to real world applications.

***Other than your major/minor/certificate students, what groups of students could find this course relevant to their degree program or career path?***

Because this is part of the teacher education training program, this course is tailored specifically for those students. If interested in physics but not an educator, consider PHY100 (general science), PHY123 (algebra and trigonometry) or PHY203 (calculus-based) for a general introductory physics course.

***Catalog Description (Fall 2022 Undergraduate Catalog)***

Laboratory experiences model inquiry teaching methods appropriate for use in early childhood, elementary and middle school science lessons. Science content includes mechanics, optics, heat, electricity and magnetism, properties of materials. Students will increase their understanding of the nature of science.