WHY MINOR IN PHYSICS?
As one of the oldest academic disciplines, the study of physics involves the study of matter, motion, energy and force in order to comprehend the behavior of the universe. A minor in Physics will diversify your college experience and opens up a wider world of career opportunities. We offer small, personalized upper level physics classes taught by our outstanding distinguished faculty holding Ph.D. degrees in different areas of physics. All the introductory courses are taught by faculty members. Our laboratory classes are offered separately to offer more flexibility for students while giving hand on activities that are necessary for conceptual understanding.

WHAT WILL I LEARN WITH A MINOR IN PHYSICS?
• Understanding of the contributions of science to our culture
• Acquire knowledge and skills necessary for life-long learning
• Present yourself as someone with strong analytic ability to prospective employers

WHAT ARE THE REQUIREMENTS?
Complete at least 15 hours of PHYS course work, with at least 10 hours in upper division (PHYS 3000-4999) courses. Choose from among the following PHYS courses, pre-requisite courses are listed in [ square brackets ]:

- PHYS 1111/L Introductory Physics I & Lab [ MATH 1112/1113/1190 ]
- PHYS 1112/L Introductory Physics II & Lab [ PHYS 1111 ]
- PHYS 2211/L Principles of Physics I & Lab [ MATH 1190 ]
- PHYS 2212/L Principles of Physics II & Lab [ MATH 2202 & PHYS 2211 ]
- PHYS 2213 Introduction to Thermal and Modern Physics [ MATH 2202, PHYS 1111/2211/L & PHYS 2212/2212/L ]
- PHYS 3110L Directed Methods [ PHYS 2211/L & Instructor Approval ]
- PHYS 3210 Intermediate Mechanics [ MATH 2306 & PHYS 2211/L ]
- PHYS 3220 Electromagnetism I [ MATH 2203 & PHYS 2212/L ]
- PHYS 3230 Optics [ PHYS 2212/L ]
- PHYS 3260 Mathematical Physics [ MATH 2203 & PHYS 2212/L ]
- PHYS 3310 How and Why: The Physics in Everyday Life [ Not for those with PHYS 1111/1112/2211/2212 credit without Instructor Approval ]
- PHYS 3340 Electronics [ PHYS 1112/2212 ]
- PHYS 3410K Electronics Laboratory [ PHYS 2212/L ]
- PHYS 3500K Introduction to Computational Physics [ PHYS 2212/L ]
- PHYS 3710 Modern Physics [ PHYS 2212/L ]
- PHYS 3720L Modern Physics Laboratory [ co-req: PHYS 3710 ]
- PHYS 3730 Relativity [ PHYS 2212/L ]
- PHYS 4200 Mechanics II [ PHYS 3210 ]
- PHYS 4210 Quantum Physics [ PHYS 3710 ]
- PHYS 4230 Thermal Physics [ PHYS 2212/L & 2213 ]
- PHYS 4240 Solid State Physics [ PHYS 3710 ]
- PHYS 4250 Quantum Theory of Two-State Systems [ MATH 2202 & PHYS 2212/L ]
- PHYS 4400 Directed Study [ Department & Instructor Approval ]
- PHYS 4410K Advanced Physics Laboratory [ PHYS 3410K & 3720L ]
- PHYS 4430 Capstone Physics Project [ Approved Petition for Graduation & Instructor Approval ]
- PHYS 4490 Special Topics in Physics [ Varies, See Schedule of Classes ]

WHAT ARE THE MATH PREREQUISITES?
For several of the upper division PHYS courses, there are also MATH prerequisite requirements. You may not need all of these, depending on which PHYS 3000-4999 courses you choose for the minor. These MATH courses are offered every semester.

- MATH 1190 Calculus I [ PHYS 1112/L ]
- MATH 1113 Precalculus [ recommended placement from MAPT; see http://placement.kennesaw.edu ]
- MATH 1112 College Trigonometry or MATH 1113 Precalculus [ Approved Petition for Graduation & Instructor Approval ]
- MATH 2202 Calculus II [ MATH 1190 ]
- MATH 2203 Calculus II [ MATH 2202 ]
- MATH 2206 Ordinary Differential Equations [ MATH 2202 ]
- MATH 2212/L Principles of Physics II & Lab [ MATH 2202 & PHYS 2211 ]
- PHYS 2212/L Principles of Physics I & Lab [ MATH 1190 ]
- PHYS 2213 Introduction to Thermal and Modern Physics [ MATH 2202, PHYS 1111/2211/L & PHYS 2212/2212/L ]
- PHYS 3110L Directed Methods [ PHYS 2211/L & Instructor Approval ]
- PHYS 3210 Intermediate Mechanics [ MATH 2306 & PHYS 2211/L ]
- PHYS 3220 Electromagnetism I [ MATH 2203 & PHYS 2212/L ]
- PHYS 3230 Optics [ PHYS 2212/L ]
- PHYS 3260 Mathematical Physics [ MATH 2203 & PHYS 2212/L ]
- PHYS 3310 How and Why: The Physics in Everyday Life [ Not for those with PHYS 1111/1112/2211/2212 credit without Instructor Approval ]
- PHYS 3340 Electronics [ PHYS 1112/2212 ]
- PHYS 3410K Electronics Laboratory [ PHYS 2212/L ]
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WHAT ELSE SHOULD I KNOW?
• If you decide to pursue the Physics minor, you will need to fill out the ‘Minor Declaration’ form, available within the College of Science & Mathematics Advising Center, in the Physics department, or online at http://science.kennesaw.edu/advising/forms.
• For a tentative two-year plan for when these PHYS courses are available, please use http://science.kennesaw.edu/advising/forecast.html.
• Per KSU policies regarding minors, please be aware of the following:
  1. The Physics minor is officially 15 hours of PHYS courses; however, 9 of these hours in the Physics minor requirements cannot be duplicated within classes that are already included as part of your major degree requirements.
  2. Students must earn a grade of at least a ‘C’ or higher for prereqs and for coursework within the minor.
  3. At least 6 hours of the upper division (3/4000-level) hours must be earned in residence at KSU.
  4. Returning to college after you have earned a baccalaureate degree to add or complete a minor is not permitted.
• Use http://catalog.kennesaw.edu for official details, course descriptions, and prerequisites.
• As part of your Petition to Graduate, you may need to fill out the ‘Minor Approval’ form, available with the Office of the Registrar, with the College of Science & Mathematics Advising Center, or with the Physics Minor Program Coordinator (see below).

WHO CAN I TALK TO?
For additional questions, please contact the Physics Minor Program Coordinator (and Physics Department Chair): Dr. Phil Patterson. He is located at the Marietta campus in 260 Academic Building (H); his office phone is 678-915-7215, and his email is ppatte11@kennesaw.edu.