CGS PHYSICS (CGS PHY)

CGS PHY 107 Physics in Everyday Life
3 cr.
Selected topics for citizens in a technological world. Emphasis on those aspects of science important to an understanding of our surroundings. For non-science majors.
Prerequisites: Math Placement Level 10 or consent of instructor.
Course Rules: May not be taken concurrently with or after having taken CGS PHY 120.
General Education Requirements: NS
Last Taught: Spring 2021, Fall 2020.
Current Offerings: https://catalog.uwm.edu/course-search/

CGS PHY 108 Laboratory for Physics in Everyday Life
1 cr.
Experiments correlated with CGS PHY 107.
Prerequisites: Concurrent enrollment in or completion of CGS PHY 107.
General Education Requirements: NS+
Last Taught: Fall 2020, Fall 2019.
Current Offerings: https://catalog.uwm.edu/course-search/

CGS PHY 110 Physics for Health Professions
4 cr.
An introductory course without laboratory for students in health-related pre-professional programs. Topics include mechanics, fluids, heat, sound, electricity, magnetism, electrical devices, optics, and radioactivity.
Prerequisites: HS general science; Math Placement Level 20.
Course Rules: May not be taken concurrently with or after having taken CGS PHY 120.
General Education Requirements: NS
Last Taught: Spring 2021, UWinteriM 2021.
Current Offerings: https://catalog.uwm.edu/course-search/

CGS PHY 120 General Physics I (Non-Calculus Treatment)
4 cr.
Mechanics, wave motion, heat, and sound.
Prerequisites: Math Placement Level 30 or grade of C or better in CGS MAT 105, CGS MAT 108, or CGS MAT 110.
Course Rules: 3 hours lecture, 1 hours discussion. Students may not receive credit for both CGS PHY 120 and CGS PHY 209.
General Education Requirements: NS
Last Taught: Fall 2020, Fall 2019.
Current Offerings: https://catalog.uwm.edu/course-search/

CGS PHY 122 General Physics II (Non-Calculus Treatment)
4 cr.
Electricity, optics, modern physics.
Prerequisites: CGS PHY 120(P).
Course Rules: 3 hr lecture, 1 hr discussion. Students may not receive credit for both CGS PHY 122 and CGS PHY 210.
General Education Requirements: NS
Current Offerings: https://catalog.uwm.edu/course-search/

CGS PHY 123 General Physics Laboratory II (Non-Calculus Treatment)
1 cr.
Experiments on topics related to the lecture material of CGS PHY 122.
Prerequisites: Concurrent enrollment in or completion of CGS PHY 122.
Course Rules: Students may not receive credit for both CGS PHY 123 and CGS PHY 215.
General Education Requirements: NS+
Current Offerings: https://catalog.uwm.edu/course-search/

CGS PHY 141 College Physics I
4-5 cr.
UW COLLEGE COURSES ONLINE ONLY. The study of mechanics, heat, wave motion and sound. Recommended for students majoring in business, elementary education, medical technology, pharmacy, pre-dentistry and pre-medical studies. Three hours of lecture and three -four hours of laboratory-discussion per week or equivalent.
Prerequisites: CGS MAT 105 or cons. instr.
Course Rules: Students may not receive credit for both CGS PHY 141 and 201.
General Education Requirements: NS+
Last Taught: Summer 2020, Spring 2020, Fall 2019.
Current Offerings: https://catalog.uwm.edu/course-search/

CGS PHY 142 College Physics II
4-5 cr.
UW COLLEGE COURSES ONLINE ONLY. A continuation of CGS PHY 141. Electricity, magnetism, light, and some modern physics.
Prerequisites: Grade of C or better in CGS PHY 141 or cons. instr.
Course Rules: Three hours of lecture and three-four hours of laboratory-discussion per week or equivalent. Students may not receive credit for both CGS PHY 142 and CGS PHY 202.
General Education Requirements: NS+
Current Offerings: https://catalog.uwm.edu/course-search/

CGS PHY 201 University Physics I
5 cr.
UW COLLEGE COURSES ONLINE ONLY. The study of mechanics, heat, wave motion, and sound.
Prerequisites: CGS MAT 221 or concurrent registration with cons. instr.
Course Rules: Recommended for physical science and engineering majors. Three hours of lecture, one hour of discussion, and three hours of laboratory per week or equivalent. Students may not receive credit for both CGS PHY 141 and CGS PHY 201.
General Education Requirements: NS+
Last Taught: Spring 2020.
Current Offerings: https://catalog.uwm.edu/course-search/
CGS PHY 202 University Physics II
5 cr.
UW COLLEGE COURSES ONLINE ONLY. A continuation of CGS PHY 201. Electricity, magnetism, light, and some modern physics.
**Prerequisites:** Grade of C or better in CGS PHY 201 or cons. instr.
**Course Rules:** Students may not receive credit for both CGS PHY 142 and CGS PHY 202.
**General Education Requirements:** NS+
**Last Taught:** Fall 2019.
**Current Offerings:** [https://catalog.uwm.edu/course-search/](https://catalog.uwm.edu/course-search/)

CGS PHY 209 Physics I (Calculus Treatment)
4 cr.
Selected topics in mechanics, wave motion, sound, and heat.
**Prerequisites:** Completion of or concurrent registration in CGS MAT 221.
**Course Rules:** 3 hr lecture, 2 hr discussion. Students may not receive credit for both CGS PHY 120 and CGS PHY 209.
**General Education Requirements:** NS
**Last Taught:** Fall 2020, Fall 2019.
**Current Offerings:** [https://catalog.uwm.edu/course-search/](https://catalog.uwm.edu/course-search/)

CGS PHY 210 Physics II (Calculus Treatment)
4 cr.
Continuation of CGS PHY 209. Electromagnetic field theory and optics. 3 hour lecture, 1 hour discussion.
**Prerequisites:** Grade of C- or better in CGS PHY 209.
**Course Rules:** Students may not receive credit for both CGS PHY 122 and CGS PHY 210.
**General Education Requirements:** NS
**Last Taught:** Spring 2021, Spring 2020.
**Current Offerings:** [https://catalog.uwm.edu/course-search/](https://catalog.uwm.edu/course-search/)

CGS PHY 214 Lab Physics I (Calculus Treatment)
1 cr.
Experiments in mechanics, wave motion, heat, and thermodynamics.
**Prerequisites:** Concurrent enrollment in or completion of CGS PHY 209.
**Course Rules:** 3 hr lab. Students may not receive credit for both CGS PHY 121 and CGS PHY 214.
**General Education Requirements:** NS+
**Last Taught:** Fall 2020, Fall 2019.
**Current Offerings:** [https://catalog.uwm.edu/course-search/](https://catalog.uwm.edu/course-search/)

CGS PHY 215 Lab Physics II (Calculus Treatment)
1 cr.
Experiments in electricity, magnetism, and optics.
**Prerequisites:** Concurrent enrollment in or completion of CGS PHY 210.
**Course Rules:** 3 hr lab. Students may not receive credit for both CGS PHY 123 and CGS PHY 215.
**General Education Requirements:** NS+
**Last Taught:** Spring 2021, Spring 2020.
**Current Offerings:** [https://catalog.uwm.edu/course-search/](https://catalog.uwm.edu/course-search/)

CGS PHY 299 Independent Study
1-3 cr.
Independent study under the supervision of an instructor. The work may, for example, consist of advanced laboratory investigation into a particular topic or library research and writing of a paper on some subject of interest.
**Prerequisites:** consent of instructor.
**Current Offerings:** [https://catalog.uwm.edu/course-search/](https://catalog.uwm.edu/course-search/)