<https://www.csudh.edu/physics/>

**Read Me File**

**Student Resources**

**What will you find here?**

**Sharing in the Information Age**

**Student Resources, News & Neat Physics, Physics Club**

**Choose the courses** for which you want to view resources; or review math or MATLAB resources. Also, there are free texts and practice exercises to prepare for pre-calculus tests, etc. in Dr. Boadi’s lab.

Scan through the resources for each course to find equation sheets that you could ask permission to print for your exams. Use the equation sheets to do your homework too.

Network with other students to help prepare for an exam using a sample test.

To check that you understand concepts, try a worksheet and discuss it with others.

A. **Courses**: **PHY 120/122, 130/132/134, 300, 305, 333/335, 306, 310, 320, 341, 346, 350/352, 380, 460/462, 498, reference MATH & MATLAB (PHY 295)**. Red courses have resources currently.

 **Sample Goodies:** **Sample Syllabus & Schedule, Equation Sheets, Sample Tests, Sample Final Exams, Worksheets,** etc. Go to your course to see a resource file full of goodies.

B. **Scheduling Courses Through to Graduation**:

<http://csudh.smartcatalogiq.com/2018-2019/Catalog/Physics/Bachelor-of-Science-in-Physics>

**Key Catalog Changes, Electrical Engineering Option, General Physics Option, Physical Science Option: Sample Schedules, Upper-division Two-Yr to Graduation**

C. **Career Planning:** **URLs for Internships (for your Resume), Writing a Résumé, A Personal Statement, An Interview, What Mentors Do.**

**Physics Club**

**Meetings and Resources**

**Career Planning Contacts**

**What Do You Want to Do?**

**Faculty Resources**

On Blackboard: Organizations: Physics

**List of Resources**

**Student Resources (not yet complete, see the specific course file)**

A. Courses: (Units)

**PHY 120&L** (5)Elements of Physics Ifor Pre-medical students and Earth Sciences

**PHY 122&L** (5)Elements of Physics Ifor Pre-medical students and Earth Sciences

**PHY 130&L** (5)General Physics I: Mechanics, Rotation/Angular Momentum, Heat & Thermodynamics, and Waves

**PHY 132&L** (5)General Physics II: Electricity, Magnetism, & Light

**PHY 134&L** (4)Modern Physics: Relativity, Quantum Theory, Atoms, Molecules, Nuclei

**PHY 295**  (3)Physics with MATLAB

**PHY 300&L**(4)Physical Science for Liberal Studies students only.

**PHY 305**  (3)Research Methods

**PHY 306**  (3)Mathematical Methods in Physics

**PHY 310**  (3)Theoretical Mechanics I

**PHY 320**  (3)Physical Optics

**PHY 333&L**(4) Analog Electronics

**PHY 335&L**(4) Digital Electronics

**PHY 341**  (2)Advanced Laboratory

**PHY 346** (3)Thermal Physics

**PHY 350** (3)Electromagnetic Theory I

**PHY 352** (3)Electromagnetic Theory II

**PHY 380**  (3)Nonlinear Phenomena

**PHY 460**  (3)Quantum Mechanics I

**PHY 462**  (3)Quantum Mechanics I

**PHY 498**  (3)Directed Research

**References MATH**

**References MATLAB (PHY 295)**

Goodies: **Sample Syllabus & Schedule, Equation Sheets, Sample Tests, Sample Final Exams, Worksheets,** etc.

B. **Scheduling Courses Through to Graduation:**

 Every Student MUST see a Physics advisor prior to lifting the hold on registration.

 (Experience: The order in which courses are taken affects the student graduation semester.)

**Key Catalog Changes:**

 **General Comments**

* Before taking CHE 110, a student must sign up for a chemistry pre-test (in NSM B202). Google “chemistry pre-tests” to practice test-taking in advance of the pre-test. A failed test means the student has to take CHE 108 before taking CHE 110.
* PHY 295 (3U) is accepted as a computational course for ANY PHY Option. PHY 295 gives physics students practice in problem-solving using MATLAB. These skills are very useful in our upper-division courses and prospective employers (for internships, summer programs, & employment) often ask if you know MATLAB. Note that one computer course alternate, CSC 121(4) (Java) requires CSC 115 (3U) (flowcharting, etc.) as a prerequisite.
* PHY 134 is accepted without PHY 132 as a prerequisite. PHY 132 is recommended only.
* PHY 306, Mathematical Methods, should be taken as soon as possible after the lower-division to facilitate all other upper-division courses.
* PHY 352 and PHY 462 are taught in the Spring alternately, PHY 352 in even years and PHY 462 in odd years. PHY 380, Nonlinear Phenomena, is taught in the Spring in odd years.
* Upper-division electives include PHY 305, 335, 352, 462, 380, and PHY 494 or PHY498. Note that PHY 498 is a research project that could look good on your résumé.
* Popular upper-division mathematics electives are MAT 311 (differential equations. MAT 271 is NOT required as a prerequisite for PHY students). Another elective, MAT 331 (Linear Algebra), requires MAT 271 as a prerequisite). Check with the Math department to see if other choices of upper-division electives require MAT 271.

**Electrical Engineering Option**

* Replace PHY 320 Optics by EGEE 203 + laboratory EGEE 203L at CSU Fullerton.
* EGEE 203 & Lab (4U) is Electric Circuits, EGEE 309 (3U) is Network Analysis, EGEE 323 (3U) is Prob & Stats, EGEE 310 & Lab (4U) is Electronic Circuits.
* Students cannot take EGEE 203 & Lab, 309, 310 & Lab, and 323 in the same semester. It takes a minimum of three semesters due to prerequisites. Any labels of EE are EGEE in the CSU Fullerton catalog.

**Electrical Engineering Option**

**General Physics Option**

**Physical Science Option**

**Sample Schedules, Upper-division Two-Yr to Graduation, Catalog Changes**

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C. Career Planning: **URLs for Internships (for your Resume), Writing a Résumé, A Personal Statement, An Interview, What Mentors Do.**

**News & Neat Physics:**

This file lists News, URLs and Youtube videos of particular interest to physicists.

**Physics Club**

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**What Do You Want?**

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**Reference MATH**

**Reference MATLAB**