

UNIVERSITY-REQUIRED TRANSFER COURSES Physical Sciences

Bachelor of Science at UHCL

2009-2010 2+2 Transfer Plan to University of Houston-Clear Lake

| FOOTNOTES | CORE CURRICULUM REQUIREMENTS* | HRS | CODE | FOOTNOTES | ADDITIONAL FOUNDATION REQUIREMENTS | HRS |
|-----------|---|-----|------|-----------|--|-----|
| a | ENGL 1301 Composition I | 3 | 10 | c, # | MATH 2414 Calculus II | 4 |
| a, # | ENGL 2311 Technical Writing (preferred) - or - ENGL 1302 Composition II | 3 | 10 | c, # | Scientific Programming Language**choose: Visual Basic, Java,C, C++,Pascal, or Fortran | 3 |
| b | Speech Communication** | 3 | 11 | c | Lower-level Elective | 8 |
| c, # | MATH 2413 Calculus I | 4 | 20 | | | 15 |
| d, # | CHEM 1411 General Chemistry I | 4 | 30 | | | |
| d, # | CHEM 1412 General Chemistry II | 4 | 30 | | | |
| e | Humanities** | 3 | 40 | | | |
| f | Visual & Performing Arts ** | 3 | 50 | | | |
| g | HIST 1301 American History I** | 3 | 60 | | | |
| g | HIST 1302 American History II** or HIST 2301, 2302 or 2303 Texas History | 3 | 60 | | | |
| g | GOVT 2301 Government I | 3 | 70 | | | |
| g | GOVT 2302 Government II | 3 | 70 | | | |
| h | Social & Behavioral Science ** | 3 | 80 | | | |
| c | Computer :Intro to Computers/Programming | 3 | 90 | | | |
| | | 49* | | | Total lower-level transfer credit hours | 60 |

EXPLANATION OF FOOTNOTES

- * UHCL's requirements are consistent with the 42-hour Texas core curriculum. If a student completes components of the core at one Texas institution, those courses will substitute for UHCL's same core components. If a student is core complete at any Texas Institution the student is also core complete at UHCL, however, foundation (#) courses are still required. The Core Code is used by Texas schools to identify which area of the 42-hour core curriculum a course fulfills.
- ** These courses may be fulfilled by approved upper-level equivalents at UHCL.
- # These courses are included in the Program Foundation Core and must be completed with a grade of "C-" or better.
- a Admission to UHCL requires **prior** completion of six hours of English Composition/Writing classes with grade of "C-" or better. *ENGL 1301 Composition I* (3 hrs) is an admission requirement for all UHCL applicants. *ENGL 2311 Technical Writing* (3 hrs), a program foundation course, will satisfy the second (3 hr) English entrance requirement for UHCL Science and Computer Engineering majors if taken at the transfer institution **prior** to admission. If an applicant takes *ENGL 1302 Composition II* instead of Technical Writing, UHCL entrance requirements are satisfied, but *Technical Writing* must also be completed before graduation.
- b Suggested courses for Speech/Communication include any SPCH course. At some transfer institutions, foreign languages may also fulfill state core Speech requirements.
- c Transfer institutions may require one or more prerequisites for these required program foundation courses, depending on the individual student's high school preparation and test scores. Students are advised to take all prerequisites required for them by their particular transfer institution. Non-remedial prerequisite courses will be transferred as lower-level electives, as needed.
- d Suggested courses for Natural Science include any ASTR, BIOL, CHEM, ESCI, GEOL or PHYS course.
- e Suggested courses for Humanities include any ENGL literature, HUMA, PHIL, RELI, or sophomore-level foreign language course – also any SPCH or HIST taken in addition to core requirements.
- f Suggested courses for Visual & Performing Arts include: any ARTS, DANC, DRAM, MUSI, or MUAP course. Three semester credit hours required.
- g Six hours of U.S. History required; three hours may be in Texas History. Six hours of U.S. Government are required and three of the six hours must, by state law, include Texas Constitutional Government.
- h Suggested courses for Social & Behavioral Science include: any ANTH, ECON, GEOG, PSYC, or SOCI course - also any GOVT, HIST, or POLS course taken in addition to core requirements.



**University
of Houston
Clear Lake**

2700 Bay Area Blvd.
Houston, TX 77058
www.UHCL.edu

Bachelor of Science in Physical Sciences

2009-2010 Catalog

GENERAL DEGREE REQUIREMENTS

- 120 semester hours of applicable college credit are required for the Bachelor of Arts or the Bachelor of Science degrees. A maximum of three hours of lower-level "activities" credits may apply toward graduation. If approved, up to 18 hours of lower-level correspondence, extension or CLEP credit may apply as lower level credit toward graduation in accordance with catalog rules.
- At least 30 hours of the degree plan, including at least 12 hours in the major, must be completed in residence at UHCL. At least 60 hours must be upper level.
- A cumulative GPA of at least 2.000 must be maintained for course work completed at UHCL, with grades of "C" or better in at least 30 hours of UHCL classes.
- Students must remain continuously enrolled (complete at least one course in a 12 month period) or meet the requirements of a later catalog.
- Students must complete the degree within seven years or meet requirements of a later catalog.

BASIC REQUIREMENTS

For the B.A. degree, graduation requires at least 12 upper-level hours in Biology completed at UHCL with grades of "C" or better.

For the B.S. degree, three specialization areas are available to students. For the B.S. degree all foundation, core and specialization courses must be completed with grades of "C" or better. Upper-level general electives are selected with advisor approval.

BACHELOR OF SCIENCE IN PHYSICAL SCIENCE - UHCL DEGREE REQUIREMENTS (60 HOURS)

PHYSICAL SCIENCE CORE (32 HOURS)

If lower level credit is given for any of the following courses, additional upper-level course work will be required to meet the minimum university requirements. Grades in Core classes must be at least "C-."

| | | |
|----------------|--|-------|
| PHYS 3031/3011 | University Physics I with Laboratory | 4 hrs |
| PHYS 3032/3012 | University Physics II with Laboratory | 4 hrs |
| PHYS 3033 | Modern Physics | 3 hrs |
| PHYS 4732 | Modern Physics Research Seminar | 3 hrs |
| PHYS 4131 | Mathematical Methods for Physicists I | 3 hrs |
| PHYS 4132 | Mathematical Methods for Physicists II | 3 hrs |
| PHYS 4331 | Principles of Electromagnetism | 3 hrs |
| PHYS 4432 | Principles of Quantum Mechanics | 3 hrs |
| PHYS 4531 | Thermodynamics & Fluid Mechanics | 3 hrs |
| PHYS 4839 | Independent Study Research | 3 hrs |

ELECTIVES (28 HOURS)

All electives must have prior approval of the student's faculty advisor. Physical Science Electives must be science or math classes.

General Electives may be any upper-level class at UHCL for which the student has appropriate prerequisites (except as noted).

| | | |
|---------------------|--|--------|
| Designated Elective | Physical Science Elective | 3 hrs |
| Designated Elective | Physical Science Elective | 3 hrs |
| Designated Elective | Physical Science Elective | 3 hrs |
| Designated Elective | Physical Science Elective | 3 hrs |
| General Elective | Must be WRIT 3135 if ENGL 2311 not taken | 3 hrs |
| General Elective | UHCL electives | 13 hrs |

School of Science and Computer Engineering Advising Office

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