

## Bachelor of Science - Physical Sciences

High School Certification: 8-12 Physical Sciences

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

### UNIVERSITY-REQUIRED TRANSFER COURSES

CORE CURRICULUM <sup>^</sup>	COURSE TITLE	HOURS	CODE <sup>^</sup>
Communication:	ENGL 1301 – Composition I (Grade must be “C-” or better)	3	10
	ENGL 1302 – Composition II (Grade must be “C-” or better)	3	10
Speech/Communication:	Public Speaking <b>required for certification</b> <sup>2</sup> (suggested courses include: SPCH 1311, 1315, 1321, 1342, 2341, 2335, 2336)	3	11
Mathematics:	MATH 1314 – College Algebra or higher-level math	3	20
Natural Science:	CHEM 1411 – General Chemistry I <b>required</b> <sup>2</sup>	3	30
	CHEM 1412 – General Chemistry II <b>required</b> <sup>2</sup>	3	30
Humanities:	ENGL literature preferred (sophomore-level) <sup>1</sup> (other acceptable courses include: HUMA, PHIL, RELI)	3	40
Visual & Performing Arts:	Suggested courses include <sup>1</sup> : ARTS, DANC, DRAM, MUSI or MUAP	3	50
Social & Behavioral Science:	HIST 1301 – United States History I <sup>1</sup>	3	60
	HIST 1302 – United States History II <sup>1</sup> or HIST 2301 – Texas History <sup>1</sup> (six hours of American History required, three of which may be Texas History)	3	60
	GOVT 2301 – American Government I	3	70
	GOVT 2302 – American Government II	3	70
	GEOG 1303 – Global Geography <b>preferred</b> <sup>1</sup> (other acceptable courses include: PSYC, SOCI, ECON, ANTH)	3	80
	Computer Competency:	Scientific Programming Language (suggested courses include Visual Basic, C, C++, Pascal, Java or Fortran)	3
		<b>Total Hours:</b>	<b>42</b>

#### ADDITIONAL LOWER-LEVEL AND FIELD OF STUDY COURSES

	HOURS
EDUC 1301 – Introduction to the Teaching Profession <sup>2,3</sup>	3
EDUC 2301 – Introduction to Special Populations <sup>2,3</sup>	3
CHEM 2423 – Organic Chemistry I ( <i>equivalent to CHEM 3233 at UHCL</i> ) <sup>1,2</sup>	3
MATH 2413 – Calculus I	3
MATH 2414 – Calculus II	3

#### NOTES:

- <sup>^</sup> 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.
- <sup>1</sup> These General Education Requirements may be fulfilled by approved upper-level equivalents at UHCL.
- <sup>2</sup> Must be completed with a grade of “C-” or better.
- <sup>3</sup> These courses are required for students pursuing the Associate of Arts in Teaching (AAT). Students not pursuing the AAT may replace these courses with approved upper-level electives.
- Associate degree requirements at the community college, including the minimum allowed grade point average, are found in the community college catalog in effect during the candidate's initial semester of continuous enrollment. See a community college counselor for more information. Please note that not all courses are offered at all community colleges. Check with your counselor for availability of courses on your campus.
- In order to meet the UHCL admission requirement of 54 hours with a cumulative GPA of 2.0 or higher, candidates may complete additional coursework at the lower level. Candidates should contact the School of Education at UHCL about additional lower-level coursework that may apply toward the bachelor's degree.
- Candidates are encouraged to attend an Admissions Preview during the semester prior to enrollment at UHCL. Contact the Office of Admissions at 281-283-2521 for dates.
- Candidates not completing ENGL 1302 can replace it with WRIT 3135 at UHCL.
- Undergraduate students who were first-time freshmen between Fall 1999 and Summer 2006 that exceed more than 45 semester credit hours beyond their state-approved degree plans and undergraduate students who were first-time freshmen starting Fall 2006 on forward that exceed more than 30 semester credit hours beyond their state-approved degree plans are subject to a tuition recovery fee to cover the student's educational costs. For more information, contact the Office of Academic Records.



University  
of Houston  
Clear Lake

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# Bachelor of Science - Physical Sciences

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### SCHOOL OF SCIENCE AND COMPUTER ENGINEERING DEGREE REQUIREMENTS

- A total of 127 semester hours of applicable college credit for the Bachelor of Science degree. No more than 18 semester hours of previously earned lower-level credit may have been taken by correspondence, extension or CLEP.
- At least 30 hours of the degree program must be taken in residence at UHCL.
- A cumulative GPA of 2.0 on coursework completed at UHCL with grades of "C" or better on at least 30 hours of resident upper-level work. Grades of "C-" and below cannot be applied toward the 30 hours of resident upper-level work.
- For teacher certification, all UHCL courses must be "C-" or better. GPA of 2.5 or higher required in the Academic Specialization and GPA of 3.0 required in the Pedagogy coursework.
- Remain continuously enrolled (complete at least one course in a 12 month period) or meet requirements of a later catalog.
- Complete the degree within seven years or meet requirements of a later catalog.

### PREREQUISITES TO TEACHER EDUCATION PROGRAM (9 HOURS)

EDUC 4130 – Theories of Educational Psychology (F/Sp/Su)

INST 3133 – Survey of Instructional Technologies (F/Sp/Su)

SILC 4135 – Theories of American Pluralism (F/Sp/Su)

TASP/THEA with minimum scores of Reading – 260, Writing – 230, Mathematics – 230

Public Speaking requirement met

2.50 GPA overall or in the last 60 semester credit hours

Completed 12 semester credit hours in the subject-specific content area for target teacher certification

Application for admission to Teacher Education Program (TEP) – available in the online ABC Workshop at [www.uhcl.edu/soe](http://www.uhcl.edu/soe)

### ACADEMIC SPECIALIZATION (36 HOURS) 2.50 GPA REQUIRED IN ACADEMIC SPECIALIZATION COURSES

ASTR 3131 – Modern Astronomy

CHEM 3230 – Survey of Physical Chemistry

GEOL 3035 – Fundamentals of Earth Science

MATH 3038 – Computational Statistics (F/Sp/Su)

PHYS 3031 – University Physics I

PHYS 3011 – University Physics I Lab

PHYS 3032 – University Physics II

PHYS 3012 – University Physics II Lab

PHYS 3033 – Modern Physics

One course from: CHEM 4732 or PHYS 4732

One sub-plan sequence:

Astronomy: ASTR 3231, ASTR 4132 & PHYS 4632

Chemistry: CHEM 3234/3224, CHEM 4335 & CHEM 4635

Geology: GEOL 3137, GEOL 3333 & GEOL 4234

Physics: PHYS 4231, PHYS 4331 & PHYS 4531

### OTHER REQUIRED COURSES (10 HOURS)

LLLS 4531 – Reading in Content Subjects (F/Sp/Su)

SPED 4030 – Survey of Exceptionalities (F/Sp/Su)

TCED 4034 – Creating Positive Learning Environments in 4-8 & 8-12 (*prerequisites are WRIT 3135 & INST 3133*) (F/Sp)

TCED 4012 – Senior Seminar II (*requires admission to TEP*) (F/Sp/Su)

### PEDAGOGY (15 HOURS): ADMISSION TO TEP REQUIRED AND 3.00 GPA REQUIRED IN PEDAGOGY COURSES (OFFERED FALL/SPRING ONLY)

TCED 4632 – Methods in Secondary Science (*prerequisite is TCED 4034*) (Sp)

**Must Be Taken Semester Immediately Preceding Final Semester:**

TCED 4738 – Pre-Service Internship I (*Every Wednesday in the field*)

**Final Semester:**

TCED 4798 – Pre-Service Internship II (*Every day in the field*)

### PASSING SCORES ON THE APPROPRIATE STATE ASSESSMENTS – TEXAS EXAMINATIONS OF EDUCATOR STANDARDS (TEXES)

8-12 Physical Science TEXES #137

8-12 Pedagogy and Professional Responsibilities TEXES #130

School of Science and Computer Engineering Academic Advising Office 281-283-3711

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