# Transfer Guide

**WCJC & UHD**

## Bachelor of Science in Biology

### 2012-2013 Catalog

Students pursuing a Bachelor of Science degree in Biology at the University of Houston-Downtown are strongly encouraged to complete the Associate Degree before transferring to UHD. The degree provides a solid foundation through the traditional liberal arts education, and Associate Degree core curriculum courses taken at Wharton County Junior College will transfer to UHD. Studies indicate students who complete an Associate degree are more likely to successfully complete a Bachelors degree.

<table>
<thead>
<tr>
<th>General Education Core (30 hours)</th>
<th>General Education Core (30 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Common Core Requirements</strong></td>
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</tr>
<tr>
<td><strong>WCJC</strong></td>
<td><strong>UHD</strong></td>
</tr>
<tr>
<td>Written Communication (6 hours)</td>
<td>Communications (9 hours)</td>
</tr>
<tr>
<td>ENGL 1301 Composition I</td>
<td>ENG 1301 Composition I</td>
</tr>
<tr>
<td>ENGL 1302 Composition II</td>
<td>ENG 1302 Composition II</td>
</tr>
<tr>
<td>Oral Communication (3 hours)</td>
<td>Oral Communication (3 hours)</td>
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<tr>
<td>SPCH 1315 Public Speaking</td>
<td>COMM 1306 Beginning Public Speaking</td>
</tr>
<tr>
<td>Mathematics (4 hours)</td>
<td>Mathematics (4 hours)</td>
</tr>
<tr>
<td>See Basic Mathematics and Sciences List</td>
<td>See Basic Mathematics and Sciences List</td>
</tr>
<tr>
<td>Natural Science (8 hours)</td>
<td>Natural Science (8 hours)</td>
</tr>
<tr>
<td>Note: Eight hours of lab sciences for science majors in the same natural science* approved by the CMS department advisor.</td>
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</tr>
<tr>
<td>BIOL, CHEM, GEOL, or PHYS</td>
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</tr>
<tr>
<td>Humanities (3 hours)</td>
<td>Humanities (3 hours)</td>
</tr>
<tr>
<td>For a complete list of all fully transferable WCJC Humanities core course options check the 2012-2013 Catalog.</td>
<td>Any literature class</td>
</tr>
<tr>
<td>NOTE: Students should consider taking a sophomore literature class to meet future prerequisites.</td>
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<tr>
<td>Visual and Performing Arts (3 hours)</td>
<td>Visual &amp; Performing Arts (3 hours)</td>
</tr>
<tr>
<td>Select 3 hours from one of the following:</td>
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<tr>
<td>ARTS, DANCE, DRAM or MUS</td>
<td>ART, DRA or MUS</td>
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<tr>
<td>American History (6 hours)</td>
<td>US History (6 hours)</td>
</tr>
<tr>
<td>HIST 1301 U.S. History I</td>
<td>HIST 1305 United States History to 1877</td>
</tr>
<tr>
<td>HIST 1302 U.S. History II</td>
<td>HIST 1306 United States History after 1877</td>
</tr>
<tr>
<td>Government (6 hours)</td>
<td>Political Science (6 hours)</td>
</tr>
<tr>
<td>GOVT 2301 American, National and State Government: Constitutions, Federalism and Participation</td>
<td>POLS 2303 United States Government I</td>
</tr>
<tr>
<td>GOVT 2302 American, National and State Government: Institutions, Rights and Public Policies</td>
<td>POLS 2304 United States Government II</td>
</tr>
<tr>
<td>Social/Behavioral Science (3 hours)</td>
<td>Social/Behavioral Science (3 hours)</td>
</tr>
<tr>
<td>Select one of the following:</td>
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</tr>
<tr>
<td>ANTH 2351 Cultural Anthropology</td>
<td>ANTH 2302 Cultural Anthropology</td>
</tr>
<tr>
<td>GEOG 1303 World Geography</td>
<td>GEOG 1302 World Geography</td>
</tr>
<tr>
<td>PSYC 2301 Introduction to General Psychology</td>
<td>PSY 1303 Introduction to Psychology</td>
</tr>
<tr>
<td>SOCI 1301 Introduction to Sociology</td>
<td>SOCI 1303 Introduction to Sociology</td>
</tr>
</tbody>
</table>

Any course taken to complete this core component not listed above will satisfy the requirement at UHD.

For a complete list of all the Social and Behavioral Science core courses options check the WCJC 2011-2012 catalog.
Kinesiology (1 hour) 090

Check the WCJC 2012-2013 catalog for a complete list of all kinesiology course options.

Computer Literacy (4 hours) 090

See List of Computer Science Courses

A transfer student who has successfully completed all of the common core requirements at WCJC or another institution of higher education will satisfy all the UHD common core requirements. If not all of the common core requirements have been completed prior to the transfer, each core course transferred will be credited and will satisfy the corresponding common core requirements at UHD. Remaining UHD common core requirements must be satisfied. All prerequisites for UHD courses must be met.

Courses not listed on this sheet that satisfy core curriculum components (see italicized number) satisfy the equivalent component at the transferring institution or as free electives.

Technical Writing (3 hours)

Select one of the following:
- ENG 3302 Business and Technical Report Writing
- ENG 3325 Medical Writing
- ENG 3326 Proposal Writing
- ENG 3329 Environmental Writing
- ENG 4306 Science Writing

Basic Science and Math (43 hour)

MATH 2413 Calculus I (fulfills core)*
- MATH 2411 Calculus I for the Life Sciences (fulfills core)*
- MATH 2412 Calculus II for the Life Sciences (fulfills core)*
- STAT 3311 Statistical Analysis for Natural Science

COSC 1436 Programming Fundamentals I (fulfills Core)*
- CS 1410 CS I-Introduction to Computer Science with C++ (fulfills Core)*

BIOL 1406 General Biology I (fulfills Core)*
- BIOL 1301/1101 General Biology I w/Lab (fulfills Core)*

BIOL 1407 General Biology II (fulfills Core)*
- BIOL 1302/1102 General Biology II w/Lab (fulfills Core)*

CHEM 1411 General Chemistry I
- CHEM 1307/1107 General Chemistry I

CHEM 1412 General Chemistry II
- CHEM 1308/1108 General Chemistry II

MBIO 2305/2105 General Microbiology w/Lab

Note: If a grade of "B" or better is earned in BIOL 2420 at WCJC, the Department at UHD will award credit for MBIO 2305/2105 General Microbiology w/Lab.

PHYS 1401 College Physics I
- PHYS 1307/1107 General Physics I w/Lab
- PHYS 1308/1108 General Physics II w/Lab

PHYS 1402 College Physics II

Biology Core Courses (20 - 21 hours)

- BIOL 3303/3103 General Genetics w/Lab
- CHEM 3301/3201 Organic Chemistry I w/Lab
- CHEM 4340/4140 General Biochemistry I w/Lab
- BIOL 3306 Biological Evolution or
- BIOL/GEOL 4301 Evolution of the Earth & its Inhabitants

One of the following 2 courses

- BIOL 4210 Biology Seminar
- MBIO 4210 Microbiology Seminar

One of the following 5 courses

- BIOL 3300 Undergraduate Research
- BIOL 4230 Advanced Laboratory in Cell & Molecular Biology
- BIOL 4232 Cell Biology Laboratory
- BIOL 4260 Environment Laboratory & Field Studies
- ^BIOL 4399 Senior Honors Thesis

^Enrollment in Honors Program Required
Biology Upper Level Options (20 hours) - at least one in each area, take additional to get to 20 hours.

**Cell/Molecular Area**
- BIOL 4320 Cellular Biology
- BIOL 4330 Molecular Biology
- BIOL 4230/4232 Advanced Lab in Cell & Molecular Biology  
  (if not above)
- BIOL 3390/4390  
  (if approved for this area)

**Plant/Fungal Area**
- BIOL 3330/3130  Plant Biology w/Lab
- BIOL 3310/3110 Plant Identification w/Lab
- BIOL 3340/3140 Biology of Fungi w/Lab
- BIOL 3390/4390  
  (if approved)

**Environmental Area**
- BIOL 3302/3102 General Ecology w/Lab
- BIOL 4260 Environmental Laboratory & Field Studies  
  (if not above)
- BIOL 4360 Environmental Biology
- BIOL 4340 Animal Behavior
- BIOL 4350 Social Biology
- BIOL 3390/4390  
  (if approved for this area)

**Organismal Area**
- BIOL 3304/3104 Vertebrate Embryology w/Lab
- BIOL 3305/3105 Human Anatomy w/lab
- BIOL 3320/3120 Human Physiology w/Lab
- BIOL 4303 Human Genetics
- BIOL 4313/4113 Parasitology w/Lab
- BIOL 4344 Principles of Pharmacology and Toxicology
- BIOL 4305 Physiological Economics of Vertebrates
- BIOL 3390/4390  
  (if approved for this area)
- MBIO 3320  Virology or
- MBIO 4340/4140 Medical Microbiology

Approved Upper Level Electives (3-4 hours)
Electives must be approved by your faculty advisor and/or program coordinator.

120 Hours Required

*Course has prerequisite not listed on this worksheet.

** This course satisfies the Sophomore Literature requirement and the World Community course requirement of the degree program.

Courses taken at Wharton County Junior College do not transfer as Upper Level credits.

**ADDITIONAL REQUIREMENTS - May be satisfied by requirements above**
- ONE ETHICAL AND MORAL ISSUES COURSE - See NS website for eligible courses
- TWO WRITING SKILLS COURSES - Satisfied by degree requirements
- ONE WORLD COMMUNITY COURSE - See NS website for eligible courses
  
  ENG 2301, 2302, 2313, or 2314 will satisfy both the Sophomore Lit and World Community requirements.
- ONE NONVERBAL ANALYTICAL SKILLS COURSE -Satisfied by degree requirements.

Check with your advisor about how requirements from the Associate of Arts, the Associate of Science, and whether requirements from the Associate of Applied Science may be applied.
For a complete list of all Academic Requirements and criteria for the College of Sciences and Technology, Natural Sciences Department, located at 813-North, call 713-221-8015, or visit the UHD web site at www.uhd.edu/sciences/ns

Revised 9/18/12