Transfer Guide
Lee College & UHD
Bachelor of Science in Biology with Concentration in Molecular & Cellular Biosciences 2012-2013

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

**General Education Core (30 hours)**

**Lee College**

**Common Core Requirements**

| Written Communication (6 hours) 010 |
| ENGL 1301 English Composition I |
| ENGL 1302 English Composition II |

**Oral Communication (3 hours) 011**

*Select one of the following:*

- SPCH 1311 Introduction to Speech Communication
- SPCH 1315 Principles of Public Speaking
- SPCH Interpersonal Communication
- SPCH 1321 Business & Professional Communication*

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

For a complete list of all fully transferable Lee College Communication courses and options check the 2012-2013 Catalog.

**Mathematics (4 hours) 020**

See List of Math courses

**Natural Science (8 hours) 030**

*Note: Eight hours of lab sciences for science majors in the same natural science* approved by the CMS department advisor.

- BIOL, CHEM, GEOL, or PHYS

**Humanities (3 hours) 040**

For a complete list of all fully transferable Lee College Humanities core course options check the 2012-2013 Catalog.

*NOTE: Students should consider taking a sophomore literature class.*

**UHD**

**General Education Core (30 hours)**

**Common Core Requirements**

| Written Communication (6 hours) 010 |
| ENG 1301 Composition I |
| ENG 1302 Composition II |

**Oral Communication (3 hours) 011**

*Select one of the following:*

- COMM 1304 Introduction to Speech Communication
- COMM 1306 Beginning Public Speaking
- COMM 2309 Interpersonal Communication
- COMM 3306 Business & Professional Speech Comm

**Mathematics (4 hours) 020**

See List of Math courses

**Natural Science (8 hours) 030**

*Note: Eight hours of lab sciences for science majors in the same natural science* approved by the CMS department advisor.

- BIOL, CHEM, GEOL, MBIO, or PHYS

**Humanities (3 hours) 040**

Any literature class
class to meet future prerequisites.

Visual and Performing Arts (3 hours) 050
Select one of the following:
ARCH, ARTS, DRAM or MUSI

Visual and Performing Arts (3 hours) 050
Select one of the following:
ART, DRA or MUS

American History (6 hours) 060
HIST 1301 History of the U.S. to 1877
HIST 1302 History of the U.S. Since 1877
HIST 2301 History of Texas
(Select 6 hours with 3 hours from U.S. History)

American History (6 hours) 060
HIST 1305 United States History to 1877
HIST 1306 United States History after 1877
HIST 2303 Texas History
HIST 2309 Ethnic Minorities in American History
(Select 6 hours with 3 hours from U.S. History)

Government (6 hours) 070
GOVT 2301 American Government I
GOVT 2302 American Government II

Government (6 hours) 070
POLS 2303 United States Government I
POLS 2304 United States Government II

Social/Behavioral Science (3 hours) 080
Select one of the following:
GEOG 1303 World Regional Geography
PSYC 2301 Introduction to Psychology
SOCI 1301 Introductory Sociology

Social/Behavioral Science (3 hours) 080
Select one of the following:
GEOG 1302 World Geography
PSY 1303 Introduction to Psychology
SOC 1303 Principles of Sociology

Any course taken to complete this core component not listed above will satisfy the requirement at UHD.
For a complete list of all fully transferable Lee College Social/Behavioral courses and options check the 2012-2013 catalog.

Kinesiology (1 hour) 090
Any One hour KINE course
For a complete list of all fully transferable Lee College KINE course options check the 2012-2013 Lee College Catalog.

Computer Literacy (4 hours)
See List of Computer Science Courses

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 Lee College 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 elective.

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 with Analytic Geometry (fulfills core)

Basic Science and Math (43 hour)
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
CS 1410 CS I-Introduction to Computer Science with C++ (fulfills Core)

COSC 1436 Programming Fundamentals I (fulfills Core)

BIOL 1406 General Biology I (fulfills Core)
BIOL 1407 General Biology II (fulfills Core)
CHEM 1411 General Chemistry I
CHEM 1412 General Chemistry II
BIOL 2421 Microbiology
PHYS 1401 College Physics I: Mechanics and Heat
PHYS 1402 College Physics II: Sound, Electricity, Magnetism, Light, and Modern Physics

BIOL 1301/1101 General Biology I w/Lab (fulfills Core)
BIOL 1302/1102 General Biology II w/Lab (fulfills Core)
CHEM 1307/1107 General Chemistry I
CHEM 1308/1108 General Chemistry II
MBIO 2305/2105 General Microbiology w/Lab
PHYS 1307/1107 General Physics I w/Lab
PHYS 1308/1108 General Physics II w/Lab

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
BIOL 3306 Biological Evolution or
BIOL/GEOL 4301 Evolution of the Earth & Inhabitants

One of the following 2 courses
BIOL 4210 Biology Seminar
MBIO 4210 Microbiology Seminar

One of the following 4 courses
BIOL 3300 Undergraduate Research
BIOL 4230 Advanced Laboratory in Cell & Molecular Biology
BIOL 4232 Cell Biology Laboratory
^BIOL 4399 Senior Honors Thesis
^Enrollment in Honors Program Required

Courses for Concentration (20 hours)
**BIOL 4330 Molecular Biology
**BIOL 4320 Cellular Biology

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

120 Hours Required

Courses taken at Lee 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