

# ASSOCIATE OF SCIENCE DEGREE

Degree candidates at Cuyahoga Community College (Tri-C®) must be in good standing. An Associate of Science degree will be granted to the student completing the following requirements.

## Comprehensive Graduation Requirements

The Associate of Science degree prepares students to continue their education at the bachelor's degree level. When selecting courses for this degree, students should select courses according to the requirements of their intended transfer destination school and major. Undecided students may use the state-approved Transfer Module as a general guide for transferability.

The following degree requirements are intended to ensure that students with an Associate of Science degree have completed the first two years of a baccalaureate degree.

1. The satisfactory completion of 60 semester credit hours at the 1000-level or higher. No more than three of the 60 credits can be completed in physical education.
2. The achievement of a minimum overall grade point average (GPA) of 2.00 for all courses attempted at Tri-C (with exceptions as provided under College policies for repeating a course, Grade Forgiveness and Fresh Start).
3. The completion of a minimum of 12 credit hours of advanced coursework (exclusive 1800-level special topics and independent study/research courses) of the 60 semester credits. Advanced coursework is defined as follows: 2000-level courses, MATH-1400 level and above, BIO-1500 level and above, CHEM-1300 level and above and PHYS-1200 level and above.
4. The completion of no fewer than 20 of the required 60 semester credit hours at the 1000-level or higher while in attendance at Tri-C.
5. Special Topics, Independent Study/Research and Cooperative Education courses may be applied to the general education and elective graduation requirements unless otherwise noted.

## First Year Experience

All new, credit-earning students are required to satisfactorily complete the GEN-1070 First Year Experience course. Students are expected to take the First Year Experience course during their first semester of enrollment. Students who have earned 20 college credit hours with a cumulative grade point average of 2.5 are exempt from taking the course.

### GEN-1070 First Year Success Seminar

Upon recommendation from a counselor, GEN-1022 Strategies for Success or GEN-1040 Career Exploration may be taken in place of GEN-1070 First Year Success Seminar. Learn more about the First Year Experience.

## General Education Requirements

Each of the College's degree programs require that students complete a set amount of courses in the areas of general education that include: Communication, Mathematics and Data Analysis, Natural and Physical Sciences, Arts and Humanities, and Social and Behavioral Sciences. Students completing the general education requirements, along with

the specific program requirements for a degree, will have achieved the College's general education outcomes.

## Communication (6 semester credit hours)

The communication skills of reading analytically, writing fluently, listening critically and speaking articulately are essential. Students must complete the following to meet this requirement:

- ENG-1010 College Composition I or ENG-101H Honors College Composition I<sup>1</sup>
- ENG-1020 College Composition II or ENG-102H Honors College Composition II or ENG-2151 Technical Writing

<sup>1</sup> Students who transfer in credits for ENG-1020 without having credit for ENG-1010 will have ENG-1010 waived, but students must select another Ohio Transfer 36 approved course to fulfill the 3 credits. The replacement course may be selected from any approved Ohio Transfer 36 course. COMM-1010 Fundamentals of Speech Communication or COMM-101H Honors Speech Communication are highly recommended.

## Mathematics and Data Analysis (6 semester credit hours)

The ability to integrate numerical, symbolical and spatial methods for scientific inquiry into the physical, natural or social and behavioral sciences is essential. Students must complete the following to meet this requirement:

- Six semester credit hours selected from the following courses (MATH-1400 level or higher):

| Code      | Title  | Credit Hours |
|-----------|--|--------------|
| MATH-1410 | Elementary Probability and Statistics I                | 3            |
| MATH-1420 | Elementary Probability and Statistics II               | 3            |
| MATH-1470 | Modern Mathematics for Business and Social Science I   | 4            |
| MATH-1480 | Modern Mathematics for Business and Social Sciences II | 4            |
| MATH-1490 | Business Probability and Statistics I                  | 3            |
| MATH-1500 | Business Probability and Statistics II                 | 3            |
| MATH-1530 | College Algebra  | 4            |
| MATH-153H | Honors College Algebra                                 | 4            |
| MATH-1540 | Trigonometry   | 3            |
| MATH-154H | Honors Trigonometry                                    | 3            |
| MATH-1580 | Precalculus  | 5            |
| MATH-1610 | Calculus I   | 5            |
| MATH-161H | Honors Calculus I                                      | 5            |
| MATH-1620 | Calculus II  | 5            |
| MATH-162H | Honors Calculus II                                     | 5            |
| MATH-2010 | Introduction to Discrete Mathematics                   | 4            |
| MATH-2310 | Calculus III   | 4            |
| MATH-231H | Honors Calculus III                                    | 4            |
| MATH-2410 | Introduction to Linear Algebra                         | 3            |
| MATH-2520 | Differential Equations                                 | 3            |

## Natural and Physical Sciences (15 semester credit hours)

The ability to undertake scientific inquiry in the physical and biological sciences is essential for students seeking an Associate of Science degree. Students must complete the following to meet this requirement:

- Fifteen semester credit hours selected from the following courses. Must include two laboratory experiences:

### Anthropology

| Code      | Title                        | Credit Hours |
|-----------|------------------------------|--------------|
| ANTH-1210 | Human Evolution <sup>1</sup> | 4            |

### Biology

| Code     | Title  | Credit Hours |
|----------|--|--------------|
| BIO-1040 | The Cell and DNA <sup>3</sup>                    | 3            |
| BIO-104L | The Cell and DNA Laboratory                      | 1            |
| BIO-1050 | Human Biology <sup>3</sup>                       | 3            |
| BIO-105L | Human Biology Laboratory                         | 1            |
| BIO-1060 | Environment, Ecology, and Evolution <sup>3</sup> | 3            |
| BIO-106L | Environment, Ecology, & Evolution Laboratory     | 1            |
| BIO-1070 | Insect Biology                                   | 3            |
| BIO-1100 | Introduction to Biological Chemistry             | 3            |
| BIO-1410 | Anatomy & Physiology of Domestic Animals I       | 4            |
| BIO-1420 | Anatomy & Physiology of Domestic Animals II      | 3            |
| BIO-1500 | Principles of Biology I                          | 4            |
| BIO-150H | Honors Principles of Biology I                   | 4            |
| BIO-1510 | Principles of Biology II                         | 4            |
| BIO-151H | Honors Principles of Biology II                  | 4            |
| BIO-2060 | Principles of Genetics                           | 3            |
| BIO-2150 | Environmental Science                            | 3            |
| BIO-2500 | Microbiology                                     | 4            |

### Chemistry

| Code      | Title   | Credit Hours |
|-----------|---|--------------|
| CHEM-1000 | Everyday Chemistry  | 3            |
| CHEM-100L | Everyday Chemistry Laboratory <sup>2</sup>                | 1            |
| CHEM-1010 | Introduction to Inorganic Chemistry                       | 4            |
| CHEM-101H | Honors Introduction to Inorganic Chemistry                | 4            |
| CHEM-1020 | Introduction to Organic Chemistry and Biochemistry        | 4            |
| CHEM-102H | Honors Introduction to Organic Chemistry and Biochemistry | 4            |
| CHEM-1300 | General Chemistry I                                       | 4            |
| CHEM-130H | Honors General Chemistry I                                | 5            |
| CHEM-130L | General Chemistry Laboratory I                            | 1            |
| CHEM-1310 | General Chemistry II                                      | 4            |
| CHEM-131H | Honors General Chemistry II                               | 5            |
| CHEM-131L | General Chemistry Laboratory II                           | 1            |

### Earth Science

| Code      | Title                                      | Credit Hours |
|-----------|--|--------------|
| ESCI-1030 | Earth <sup>3</sup>                         | 3            |
| ESCI-1050 | Introduction to Ocean Studies <sup>3</sup> | 3            |
| ESCI-1310 | Physical Geography <sup>3</sup>            | 3            |
| ESCI-131L | Lab in Physical Geography                  | 1            |
| ESCI-1410 | Physical Geology <sup>3</sup>              | 3            |
| ESCI-141L | Lab in Physical Geology <sup>1</sup>       | 1            |
| ESCI-1610 | Geology of the National Parks <sup>3</sup> | 3            |
| ESCI-161L | Lab in Geology of the National Parks       | 1            |

### Physics

| Code      | Title                  | Credit Hours |
|-----------|------------------------|--------------|
| PHYS-1010 | Astronomy <sup>3</sup> | 3            |
| PHYS-101L | Astronomy Laboratory   | 1            |
| PHYS-1050 | Everyday Physics       | 2            |
| PHYS-1210 | College Physics I      | 4            |
| PHYS-1220 | College Physics II     | 4            |
| PHYS-2310 | General Physics I      | 5            |
| PHYS-2320 | General Physics II     | 5            |

<sup>1</sup> ANTH-1210 Human Evolution, ESCI-131L Lab in Physical Geography, and ESCI-141L Lab in Physical Geology can be taken to meet the Ohio Transfer 36 Natural and Physical Sciences laboratory requirement and are approved to be offered in a fully online format.

<sup>2</sup> CHEM-100L Everyday Chemistry Laboratory can also be taken to meet the Ohio Transfer 36 Natural and Physical Sciences requirement, but is currently approved to be offered in hybrid format only. Students will be required to come to campus during the term enrolled.

<sup>3</sup> BIO-1040, 1050, 1060, ESCI-1030, ESCI-1050, ESCI-1310, ESCI-1410, ESCI-1610, and PHYS-1010 are natural and physical sciences lecturers offered online, and will fulfill the remaining credits to meet Ohio Transfer 36 Natural and Physical Science requirements. Only ESCI-1410 has a corresponding lab that is offered online.

## Social and Behavioral Sciences (6 semester credit hours)

The opportunity to obtain a broader knowledge of the social and behavioral sciences in order to understand, analyze and describe aspects of human behavior from diverse political, social, historical and cultural perspectives is an important part of a liberal arts education. Students must complete the following to meet this requirement:

- Six semester credit hours selected from the following courses, must be selected from two disciplines:

### Anthropology

| Code      | Title                              | Credit Hours |
|-----------|------------------------------------|--------------|
| ANTH-1010 | Cultural Anthropology <sup>1</sup> | 3            |
| ANTH-2010 | Peoples and Cultures of the World  | 3            |
| ANTH-2110 | Archaeology                        | 3            |

<sup>1</sup> ANTH-1210 Human Evolution cannot be used to meet the Social & Behavioral Sciences Requirement.

**Economics**

| Code      | Title                        | Credit Hours |
|-----------|------------------------------|--------------|
| ECON-1210 | Survey of Economics          | 3            |
| ECON-2000 | Principles of Microeconomics | 3            |
| ECON-2010 | Principles of Macroeconomics | 3            |

**Geography**

| Code      | Title  | Credit Hours |
|-----------|--|--------------|
| GEOG-1000 | Introduction to Geography                          | 3            |
| GEOG-1010 | World Regional Geography                           | 3            |
| GEOG-1050 | Africans in the Americas                           | 3            |
| GEOG-1510 | Regional Geography of the United States and Canada | 3            |
| GEOG-2030 | Environmental Geography                            | 3            |

**History**

| Code      | Title                                   | Credit Hours |
|-----------|---|--------------|
| HIST-1010 | History of Civilization I               | 3            |
| HIST-101H | Honors History of Civilization I        | 3            |
| HIST-1020 | History of Civilization II              | 3            |
| HIST-102H | Honors History of Civilization II       | 3            |
| HIST-1510 | United States History to 1877           | 3            |
| HIST-151H | Honors United States History to 1877    | 3            |
| HIST-1520 | United States History Since 1877        | 3            |
| HIST-152H | Honors United States History since 1877 | 3            |
| HIST-1700 | History of Africa                       | 3            |
| HIST-2700 | History of Modern Africa                | 3            |

**Political Science**

| Code     | Title                                      | Credit Hours |
|----------|--|--------------|
| POL-1010 | American National Government               | 3            |
| POL-101H | Honors American National Government        | 3            |
| POL-1020 | State & Local Government                   | 3            |
| POL-2020 | Introduction to Conflict and Peace Studies | 3            |
| POL-2030 | Comparative Politics                       | 3            |
| POL-2060 | Political Systems of Africa                | 3            |
| POL-2070 | International Relations                    | 3            |
| POL-2100 | Constitutional Law                         | 3            |

**Psychology**

| Code     | Title  | Credit Hours |
|----------|--|--------------|
| PSY-1010 | General Psychology                                   | 3            |
| PSY-101H | Honors General Psychology                            | 3            |
| PSY-1050 | Introduction to Industrial/Organizational Psychology | 3            |
| PSY-2010 | Child Growth and Development                         | 3            |
| PSY-2020 | Life Span Development                                | 4            |
| PSY-202H | Honors Life Span Development                         | 4            |
| PSY-2040 | Social Psychology                                    | 3            |
| PSY-2050 | Psychology of Personality                            | 3            |
| PSY-2060 | Adolescent Psychology                                | 3            |

|          |                        |   |
|----------|------------------------|---|
| PSY-2081 | Psychopathology        | 3 |
| PSY-2100 | Introduction to Aging  | 3 |
| PSY-2110 | Educational Psychology | 3 |

**Sociology**

| Code     | Title                         | Credit Hours |
|----------|-------------------------------|--------------|
| SOC-1010 | Introductory Sociology        | 3            |
| SOC-101H | Honors Introductory Sociology | 3            |
| SOC-1020 | Social Institutions           | 3            |
| SOC-2010 | Social Problems               | 3            |
| SOC-201H | Honors Social Problems        | 3            |
| SOC-2020 | Sociology of the Family       | 3            |
| SOC-2100 | Aging and Society             | 3            |
| SOC-2110 | Death and Dying               | 3            |
| SOC-2160 | Introduction to Criminology   | 3            |
| SOC-2550 | Race and Ethnic Relations     | 3            |

**Urban Studies**

| Code     | Title                         | Credit Hours |
|----------|-------------------------------|--------------|
| UST-1010 | Introduction to Urban Studies | 3            |
| UST-2020 | Urban Cultures                | 3            |

**Women's and Gender Studies**

| Code     | Title   | Credit Hours |
|----------|---|--------------|
| WGS-1510 | Introduction to Women's and Gender Studies        | 3            |
| WGS-151H | Honors Introduction to Women's and Gender Studies | 3            |
| WGS-2010 | Women in the World                                | 3            |
| WGS-201H | Honors Women in the World                         | 3            |
| WGS-2120 | Women and Politics                                | 3            |

<sup>1</sup> ANTH-1210 Human Evolution cannot be used towards the Social and Behavioral Sciences Requirement.

**Arts and Humanities (6 semester credit hours)**

The appreciation of the achievements of the arts and humanities provides the ability to integrate learning within a complex global perspective; to gain an awareness of and respect for different cultures; and to integrate ethical decision making in dealing responsibly with personal, family and community issues. Students must complete the following to meet this requirement:

- Six semester credit hours selected from the following courses must be selected from at least two disciplines.

**Art**

| Code     | Title  | Credit Hours |
|----------|--|--------------|
| ART-1010 | Art Appreciation                               | 3            |
| ART-1040 | Survey of Non-Western Art                      | 3            |
| ART-2020 | Art History Survey: Prehistoric to Renaissance | 3            |

|          |  |   |
|----------|--|---|
| ART-202H | Honors Art History Survey: Prehistoric to Renaissance  | 3 |
| ART-2030 | Art History Survey: Late Renaissance to Present        | 3 |
| ART-203H | Honors Art History Survey: Late Renaissance to Present | 3 |

**Dance**

| Code      | Title              | Credit Hours |
|-----------|--------------------|--------------|
| DANC-1100 | Dance Appreciation | 3            |

**English 2000-Level Literature courses**

| Code     | Title  | Credit Hours |
|----------|--|--------------|
| ENG-2020 | Women Writers on the Experiences of Women                | 3            |
| ENG-2310 | American Literature I                                    | 3            |
| ENG-2320 | American Literature II                                   | 3            |
| ENG-2350 | British Literature I                                     | 3            |
| ENG-2360 | British Literature II                                    | 3            |
| ENG-2410 | Introduction to Literature: Poetry                       | 3            |
| ENG-2420 | Introduction to Literature: Fiction                      | 3            |
| ENG-2430 | Introduction to Literature: Drama                        | 3            |
| ENG-2510 | African-American Literature I                            | 3            |
| ENG-2520 | African-American Literature II                           | 3            |
| ENG-2601 | Literature for Children and Adolescents                  | 3            |
| ENG-2700 | World Literature   | 3            |
| ENG-2710 | Shakespeare  | 3            |
| ENG-2730 | Exploration of World Mythology                           | 3            |
| ENG-2770 | Rhetorics of Gaming: Introduction to Video Game Analysis | 3            |

**History**

| Code      | Title                                 | Credit Hours |
|-----------|---------------------------------------|--------------|
| HIST-2031 | Islam to the Modern Middle East       | 3            |
| HIST-2150 | African American History to 1877      | 3            |
| HIST-2160 | African American History 1877-present | 3            |
| HIST-2520 | Hitler and the Holocaust              | 3            |
| HIST-2660 | Women in American History             | 3            |

**Humanities**

| Code     | Title                                       | Credit Hours |
|----------|---|--------------|
| HUM-1010 | Introduction to Humanities                  | 3            |
| HUM-1020 | The Individual in Society                   | 3            |
| HUM-102H | Honors Individual in Society                | 3            |
| HUM-2020 | Community Engagement Through the Humanities | 3            |
| HUM-2030 | Culture and Belief                          | 3            |

**Media and Journalism Studies**

| Code     | Title             | Credit Hours |
|----------|-------------------|--------------|
| MJS-1310 | Film Appreciation | 3            |

**Music**

| Code     | Title                              | Credit Hours |
|----------|------------------------------------|--------------|
| MUS-1010 | Survey of European Classical Music | 3            |
| MUS-1020 | Survey of Jazz                     | 3            |
| MUS-1030 | Survey of Rock and Roll            | 3            |
| MUS-1040 | Survey of African-American Music   | 3            |
| MUS-1050 | Survey of World Music              | 3            |
| MUS-2541 | Jazz History                       | 3            |

**Philosophy**

| Code      | Title                             | Credit Hours |
|-----------|-----------------------------------|--------------|
| PHIL-1000 | Critical Thinking                 | 3            |
| PHIL-1010 | Introduction to Philosophy        | 3            |
| PHIL-101H | Honors Introduction to Philosophy | 3            |
| PHIL-2020 | Ethics                            | 3            |
| PHIL-202H | Honors Ethics                     | 3            |
| PHIL-2050 | Bioethics                         | 3            |
| PHIL-205H | Honors Bioethics                  | 3            |
| PHIL-2060 | Business Ethics                   | 3            |
| PHIL-208H | Honors Social Justice             | 3            |

**Religious Studies**

| Code     | Title  | Credit Hours |
|----------|--|--------------|
| REL-1010 | Introduction to Religious Studies            | 3            |
| REL-2000 | Comparative World Religions                  | 3            |
| REL-2010 | Religious Traditions of Western Christianity | 3            |
| REL-2060 | African-American Religious Experience        | 3            |

**Theatre Arts**

| Code      | Title                          | Credit Hours |
|-----------|--------------------------------|--------------|
| THEA-1010 | Theatre Appreciation           | 3            |
| THEA-2210 | History of Theatre and Drama I | 3            |
| THEA-2220 | History of Theatre & Drama II  | 3            |

**Diversity, Equity, and Inclusion**

| Code      | Title   | Credit Hours |
|-----------|---|--------------|
| COMM-2160 | Intercultural Communication                       | 3            |
| ENG-2510  | African-American Literature I                     | 3            |
| ENG-2520  | African-American Literature II                    | 3            |
| MJS-1611  | Black Media                                       | 3            |
| SOC-2550  | Race and Ethnic Relations                         | 3            |
| WGS-1510  | Introduction to Women's and Gender Studies        | 3            |
| WGS-151H  | Honors Introduction to Women's and Gender Studies | 3            |
| WGS-2010  | Women in the World                                | 3            |
| WGS-201H  | Honors Women in the World                         | 3            |

## **Elective Graduation Requirements (21 semester credit hours)**

The remaining semester credits needed to complete the required minimum total of 60 semester credits may be chosen from 1000-level courses and above, exclusive of developmental coursework. Courses taken for general education requirements cannot count toward fulfilling elective graduation requirements. Students wishing to maximize the use of credits toward a bachelor's degree should select electives according to the requirements of their intended transfer destination school or major. The state-approved Transfer Module provides a general guide for transferability.

## **Cross-listed Courses**

Cross-listed courses are identical courses offered in two or more subject areas. They differ only in subject area code and course number. Credit may be earned once for cross-listed courses.