## College Transfer Programs

## A 10400 Associate in Science

## CONCENTRATION OVERVIEW

The Associate in Science Degree is designed to meet the two-year general college requirement of four-year colleges and universities. The curriculum has a heavy concentration in mathematics and science areas to allow College of The Albemarle students, after two years of study, to transfer with junior-level status. This curriculum is suited to students who want to pursue a four-year degree in areas of study such as computer science, engineering, mathematics, the sciences or professional programs that require strong mathematics and science backgrounds.

Upon completion of this concentration, graduates will be able to analyze and solve quantitative problems, reason logically from hypothesis to conclusion, apply mathematics techniques in scientific problem solving, and use laboratory technology, equipment, and techniques critically and safely to investigate scientific problems using proper scientific methods.

## Student Learning Outcomes - Upon completion of the program, students will:



1. Prepare a deliverable designed to increase knowledge, foster understanding, or promote change in audiences' attitudes, values, beliefs, or behavior.
2. Apply appropriate strategies to identify materials, evaluate information, and reference relevant discipline materials to effectively address a topic.
3. Use mathematical skills to logically analyze and interpret mathematics in context.
4. Develop meaningful questions, gather and analyze evidence, and create evidence-based conclusions or solutions.

In compliance with state transfer articulation agreements, only courses with a grade of $C$ or higher will fulfill degree requirements in this program.

Partnership: College of The Albemarle has articulation agreements with certain universities for students transferring into specific programs of study. Students can complete the first two years of that specific baccalaureate degree at College of The Albemarle. Students should check with their advisor and the COA website for more information. www.albemarle.edu/ student-resources/transfer-from-coa/

COA students who earn an Associate of Science degree and follow the designated degree plans can transition seamlessly into the Bachelor of Science in Biology and Biblical Studies degree or the Bachelor of Science in Science Education degree at Mid-Atlantic Christian University.

## A 10400 Associate in Science - First Year

| COURSE NUMBER | COURSE TITLE | SEMESTER | CO-REQUISITES | PRE-REQUISITES | CREDITS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| STUDENT SUCCESS |  |  |  |  | 1 |
| ACA 122 | College Transfer Success |  |  | None | 1 |
| COMPOSITION |  |  |  |  | 6 |
| ENG 111 | Writing \& Inquiry |  | ENG 011 | ENG 002 Tier 1 | 3 |
| ENG 112 | Writing/Research in the Disciplines |  |  | ENG 111 | 3 |
| MATHEMATICS |  |  |  |  | 8-9 |

## Select 2 courses from:

MAT 171 (MAT 003 Tier 2 or MAT 143 or MAT 152), MAT 172 (MAT 171 with a grade of $C$ or higher), MAT 175 (MAT 003 Tier 3), MAT 263 (MAT 171 with a grade of $C$ or higher), MAT 271 (MAT 172 with a grade of $C$ or higher), or MAT 272 (MAT 271 with a grade of C or higher). Note: Students cannot receive credit for both MAT 263 and MAT 271. Students cannot receive credit for MAT 175 if they have credit for MAT 171-172.

|  |  |  | Varies | Varies - pre-requisites in <br> parentheses | $4-5$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
|  |  |  | Varies | Varies - pre-requisites in <br> parentheses | 4 |
| NATURAL SCIENCES |  |  |  |  |  |

Select a two-course sequence from:
BIO 111-112 (ENG 002 Tier 1 and MAT 003 Tier 1), CHM 151-152 (ENG 002 Tier 1 and MAT 003 Tier 2, and either CHM 090 or one unit of HS Chemistry), PHY 151-152 (MAT 171 or MAT 271), or PHY 251-252 (MAT 271 and co-requisite MAT 272).

|  |  |  | Varies | Varies - pre-requisites in <br> parentheses | 4 |
| :--- | :--- | :--- | :--- | :--- | :---: |
|  |  |  | Varies | Varies - pre-requisites in <br> parentheses | 4 |
| SOCIAL/BEHAVIORAL SCIENCES |  |  |  |  |  |

## Select 2 courses from different disciplines:

ECO 251 (ENG 002 Tier 1 and MAT 003 Tier 1), ECO 252 (ENG 002 Tier 1 and MAT 003 Tier 1), HIS 111 (ENG 002 Tier 1), HIS 112 (ENG 002 Tier 1), HIS 131 (ENG 002 Tier 1), HIS 132 (ENG 002 Tier 1), POL 120 (ENG 002 Tier 1), PSY 150 (ENG 002 Tier 1), or SOC 210 (ENG 002 Tier 1).

|  |  |  |  | Varies - pre-requisites in <br> parentheses | 3 |
| :--- | :--- | :--- | :--- | :--- | :---: |
|  |  |  | Varies-pre-requisites in <br> parentheses | $\mathbf{3}$ |  |
| HEALTH/WELLNESS |  |  | $\mathbf{2 - 3}$ |  |  |

## Select 2-3 credit hours from:

HEA 110-3 credit hours (ENG 002 Tier 1), PED $110-2$ credit hours (none), or two 1 -credit-hour PED activity courses (Level 1 and Beginning activity courses have no pre-requisites; Level 2 and Intermediate activity courses have a pre-requisite of the corresponding Level 1 or Beginning activity courses).

|  |  |  | Varies - pre-requisites in <br> parentheses | $2-3$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: |
| TOTAL SEMESTER HOURS REQUIRED FOR ASSOCIATE DEGREE - FIRST YEAR |  |  |  |  |  | $\mathbf{3 1 - 3 2}$ |

## A 10400 Associate in Science - Second Year

| COURSE <br> NUMBER | COURSE TITLE | SEMESTER | CO-REQUISITES | PRE-REQUISITES | CREDITS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MATHEMATICS/NATURAL SCIENCES |  |  |  |  | 8 |
| Select 2 courses from: <br> MAT 172 (MAT 171 with a grade of $C$ or higher), MAT 263 (MAT 171 with a grade of $C$ or higher), MAT 271 (MAT 172 with a grade of C or higher), MAT 272 (MAT 271 with a grade of $C$ or higher), MAT 273 (MAT 272 with a grade of $C$ or higher), BIO 111 (ENG 002 Tier 1 and MAT 003 Tier 1), BIO 112 (BIO 111), CHM 151 (ENG 002 Tier 1 and MAT 003 Tier 2, and either CHM 090 or one unit of HS Chemistry), CHM 152 (CHM 151), PHY 151 (MAT 171 or MAT 271), PHY 152 (PHY 151), PHY 251 (MAT 271 and co-requisite MAT 272), or PHY 252 (MAT 272 and PHY 251). <br> NOTE: Students cannot receive credit for MAT 263 if they have taken MAT 271-272. Students can only receive credit for one PHY sequence in this degree. Student cannot recelve credit for MAT 175 if they have credit for MAT 171-172. |  |  |  |  |  |
|  |  |  | Varies | Varies - pre-requisites in parentheses | 4 |
|  |  |  | Varies | Varies - pre-requisites in parentheses | 4 |
| HUMANITIES/FINE ARTS |  |  |  |  | 3 |

## Select 1 course from:

ART 111 (none), ART 114 (ENG 002 Tier 1), ART 115 (ENG 002 Tier 1), DRA 111 (none), ENG 231 (ENG 112), ENG 232 (ENG 112), ENG 241 (ENG 112), ENG 242 (ENG 112), MUS 110 (none), MUS 112 (none), or PHI 240 (ENG 111).

|  |  |  | Varies - pre-requisites in <br> parentheses | 3 |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
| COMMUNICATIONS |  |  | 3 |  |  |
| COM 231 | Public Speaking |  |  | ENG 111 | 3 |

## OTHER GENERAL EDUCATION HOURS

Select 2-3 additional credit hours from the College of The Albemarle (COA) list of Comprehensive Articulation Agreement (CAA) courses, coded either as Universal General Education Transfer Course (UGETC) or as General Education (GEN ED).

|  |  |  | Varies | $2-3$ |
| :--- | :--- | :--- | :--- | :---: |
| ADDITIONAL COURSEWORK |  |  |  |  |

Select 11-12 additional credit hours from the College of The Albemarle list of Comprehensive Articulation Agreement (CAA) courses.

|  |  |  |  | Varies | $11-12$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
|  |  |  |  | Varies | Varies |
|  |  |  |  | Varies | Varies |
|  |  |  |  | Varies | Varies |
|  |  |  |  | Varies | Varies |
| TOTAL SEMESTER HOURS REQUIRED FOR ASSOCIATE DEGREE |  |  |  |  | $60-61^{*}$ |

* The total number of elective hours needed is based upon course choices made in the Mathematics/Natural Sciences and Health/Wellness areas. A student must have 60-61 credit hours to complete this degree.


## A 10400 Associate in Science Suggested Sequence of Courses

| First Year Fall Semester Course Number and Title | Pre-Requisites and Co-Requisites | Class <br> Hours | Lab Hours | Clinical Hours | Total Contact Hours | Total Credit <br> Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACA 122 College Transfer Success | Pre-Requisites: None | 0 | 2 | 0 | 2 | 1 |
| ENG 111 Writing and Inquiry | Pre-Requisites: ENG 002 Tier 1 Co-Requisites: ENG 011 | 3 | 0 | 0 | 3 | 3 |
| Mathematics | Pre-Requisites: Varies Co-Requisites: Varies | 3-4 | 2 | 0 | 5-6 | 4-5 |
| Natural Science | Pre-Requisites: Varies Co-Requisites: Varies | 3 | 2-3 | 0 | 5-6 | 4 |
| Social /Behavioral Science | Pre-Requisites: Varies | 3 | 0 | 0 | 3 | 3 |
| TOTAL SEMESTER HOURS |  | 12-13 | 6-7 | 0 | 18-19 | 15-16 |
| First Year Spring Semester Course Number and Title | Pre-Requisites and Co-Requisites | Class <br> Hours | Lab <br> Hours | Clinical Hours | Total Contact Hours | Total Credit Hours |
| ENG 112 Writing/Research in Disciplines | Pre-Requisites: ENG 111 | 3 | 0 | 0 | 3 | 3 |
| Mathematics | Pre-Requisites: Varies Co-Requisites: Varies | 3 | 2 | 0 | 5 | 4 |
| Natural Science | Pre-Requisites: Varies Co-Requisites: Varies | 3 | 2-3 | 0 | 5-6 | 4 |
| Social/Behavioral Science | Pre-Requisites: Varies | 3 | 0 | 0 | 3 | 3 |
| Health/Wellness | Pre-Requisites: Varies | 0-3 | 2-3 | 0 | 2-3 | 2-3 |
| TOTAL SEMESTER HOURS |  | 12-15 | 6-8 | 0 | 18-20 | 16-17 |
| Second Year Fall Semester Course Number and Title | Pre-Requisites and Co-Requisites | Class <br> Hours | Lab <br> Hours | Clinical <br> Hours | Total Contact Hours | Total Credit Hours |
| Mathematics/ <br> Natural Science | Pre-Requisites: Varies Co-Requisites: Varies | 3 | 2-3 | 0 | 5-6 | 4 |
| Humanities/Fine Arts | Pre-Requisites: Varies | 3 | 0 | 0 | 3 | 3 |
| General Education Elective | Pre-Requisites: None | 2-3 | 0 | 0 | 2-3 | 2-3 |
| (CAA) Elective(s) | Pre-Requisites: Varies | Varies | Varies | 0 | Varies | 3 |
| TOTAL SEMESTER HOURS |  | Varies | Varies | 0 | Varies | 12-13 |


| Second Year Spring Semester Course Number and Title | Pre-Requisites and Co-Requisites | Class <br> Hours | Lab Hours | Clinical <br> Hours | Total Contact Hours | Total Credit Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mathematics/ Natural Science | Pre-Requisites: Varies Co-Requisites:Varies | 3 | 2-3 | 0 | 5-6 | 4 |
| COM 231 Public Speaking | Pre-Requisites: ENG 111 | 3 | 0 | 0 | 3 | 3 |
| (CAA) Elective(s) | Pre-Requisites: Varies | Varies | Varies | 0 | Varies | 8-9 |
| TOTAL SEMESTER HOURS |  | Varies | Varies | 0 | Varies | 15-16 |
| TOTAL DEGREE HOURS REQUIRED FOR ASSOCIATE DEGREE 60-61* |  |  |  |  |  |  |

*Number of hours of CAA and general education elective coursework needed is based upon course choices made in the first year mathematics course, in other general education hours, and in the health/wellness choice. Courses should be chosen based upon requirements for student's intended major at the receiving four-year institution. A student must have 60-61 credit hours to complete the degree.

