

2+2 Articulation Agreement for Anne Arundel Community College and Towson University

Associate's Degree: A.S. in Arts & Sciences Transfer, Chemistry Concentration

Bachelor's Degree: B.S. in Forensic Chemistry

Effective Term: Fall 2020

Section 1: Course Completion Plan for AACC

This section outlines the courses to take for the

English Composition	ENG 101 Academic Writing & Research 1	3	ENGL 102 Writing for a Liberal Education
Mathematics	MAT 191 Calculus & Analytic Geometry 1	4	MATH 273 Calculus I
Arts & Humanities	Any Arts & Humanities course	3	Equivalency varies by course.
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Social & Behavioral Sciences	Any Social & Behavioral Science course	3	Equivalency varies by course.
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			Lecture & Lab
Wellness Requirement	Any Wellness GER course	3	Equivalency varies by course.

Table 2: Program Requirements and Electives Applied to TU Degree

AACC Requirement

AACC

Section 2: AACC Course Selection Details

This section explains any specific course selections made in section 1 and provides transfer planning guidance specific to this degree plan. Students must follow the course selections outlined in this document. If students do not complete any or all of the courses outlined in this agreement, they will be required to complete outstanding requirements at TU.

GENERAL EDUCATION

Students must note the following general education requirements and information:

Arts & Humanities: Students may need to select their two Arts & Humanities courses from specific subjects at AACC. Students should consult their AACC catalog or academic advisor for details. Courses taken for this requirement will transfer regardless of subject and will not affect the major requirements at TU.

Social & Behavioral Sciences: Students may need to select their two Social & Behavioral Science courses from specific subjects at AACC. Students should consult their AACC catalog or academic advisor for details. Courses taken for this requirement will transfer regardless of subject and will not affect the major requirements at TU.

Diversity Requirement: Students must select an approved **diversity course** for one of the Arts & Humanities or Social & Behavioral Science requirements in order to satisfy AACC degree requirements.

Total Credits: Though the AACC degree requires only 33 credits of general education, C

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LOWER-LEVEL EQUIVALENTS OF UPPER-LEVEL COURSES

A course number beginning with T indicates that it is a lower-level equivalent of an upper-level TU course. CHEM T31 and CHEM T32 will satisfy the major requirements for CHEM 331 and 332, but they will not count toward the TU degree requirement for 32 upper-level units.

MATH AND CHEMISTRY PREREQUISITES

The Chemistry program is designed for students who are ready to enroll in calculus and general chemistry in their first term. Students should note the following requirements for enrollment into these courses:

MAT 191 Calculus 1: Enrollment in this course requires an appropriate score on the AACC Mathematics Placement

Section 3: Degree Requirements to Be Completed at TU

This section outlines the degree requirements for students transferring into the Forensic Chemistry major, which offers three tracks to prepare students for specialized work in forensic science or graduate studies. Refer to section 4 for additional major requirements, university-wide degree requirements, and detailed descriptions of each track.

CORE CURRICULUM REQUIREMENTS: 6 UN

Trace Evidence/Drug Analysis Track – 18 units

CHEM 310 Instrumental Analysis (4 units)

CHEM 345 Principles of Physical Chemistry (3 units)

CHEM 372 Physical Chemistry Laboratory (2 units)

CHEM 480 Chemical Toxicology (3 units)

FRSC 363 Chemistry of Dangerous Drugs (3 units)

FRSC 467 Forensic Analytical Chemistry (3 units)

DNA Track – 20 units

BIOL 309 Genetics (4 units)

BIOL 409 Molecular Biology (4 units)

BIOL 410 Molecular Biology Laboratory (2 units)

CHEM 356 Biochemistry Lab (2 units)

MBBB 301 Intro to Bioinformatics (4 units)

FRSC 420 Body Fluid Analysis (4 units)

GENERAL ELECTIVES: 0-2 UNITS

The number of elective units required will be determined by the student's track and is based on the transfer of 60 credits. If students transfer more than 60 credits due to any mathematics prerequisites, they will not need to take any general elective units.

Section 4: Additional Requirements & Recommendations for TU Degree Completion

FORENSIC CHEMISTRY TRACK DESCRIPTIONS:

General Forensic Science – This track is intended for students who are considering employment in a drug analysis, trace evidence analysis or DNA analysis laboratory, or to pursue a graduate degree in a non-specialized forensic master's program.

Trace Evidence/Drug Analysis – This track is intended for students who desire a strong chemistry and instrumental analysis education and are considering a profession in a forensic chemistry laboratory or graduate program specializing in the analysis of trace evidence (e.g. fibers, paint, soil, flammables, or explosives) or in the analysis of illegal drugs and toxicology.

DNA – This track is intended for students who desire a strong biochemistry and molecular biology education and are considering a profession in a forensic laboratory or graduate program specializing in body fluid and tissue analysis, and human identification using serology and DNA technology.

ADDITIONAL REQUIREMENTS: CHEM 101, CHEM 102, CHEM 103, CHEM 104, CHEM 105, CHEM 106, CHEM 107, CHEM 108, CHEM 109, CHEM 110, CHEM 111, CHEM 112, CHEM 113, CHEM 114, CHEM 115, CHEM 116, CHEM 117, CHEM 118, CHEM 119, CHEM 120, CHEM 121, CHEM 122, CHEM 123, CHEM 124, CHEM 125, CHEM 126, CHEM 127, CHEM 128, CHEM 129, CHEM 130, CHEM 131, CHEM 132, CHEM 133, CHEM 134, CHEM 135, CHEM 136, CHEM 137, CHEM 138, CHEM 139, CHEM 140, CHEM 141, CHEM 142, CHEM 143, CHEM 144, CHEM 145, CHEM 146, CHEM 147, CHEM 148, CHEM 149, CHEM 150, CHEM 151, CHEM 152, CHEM 153, CHEM 154, CHEM 155, CHEM 156, CHEM 157, CHEM 158, CHEM 159, CHEM 160, CHEM 161, CHEM 162, CHEM 163, CHEM 164, CHEM 165, CHEM 166, CHEM 167, CHEM 168, CHEM 169, CHEM 170, CHEM 171, CHEM 172, CHEM 173, CHEM 174, CHEM 175, CHEM 176, CHEM 177, CHEM 178, CHEM 179, CHEM 180, CHEM 181, CHEM 182, CHEM 183, CHEM 184, CHEM 185, CHEM 186, CHEM 187, CHEM 188, CHEM 189, CHEM 190, CHEM 191, CHEM 192, CHEM 193, CHEM 194, CHEM 195, CHEM 196, CHEM 197, CHEM 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598, CHEM 599, CHEM 600, CHEM 601, CHEM 602, CHEM 603, CHEM 604, CHEM 605, CHEM 606, CHEM 607, CHEM 608, CHEM 609, CHEM 610, CHEM 611, CHEM 612, CHEM 613, CHEM 614, CHEM 615, CHEM 616, CHEM 617, CHEM 618, CHEM 619, CHEM 620, CHEM 621, CHEM 622, CHEM 623, CHEM 624, CHEM 625, CHEM 626, CHEM 627, CHEM 628, CHEM 629, CHEM 630, CHEM 631, CHEM 632, CHEM 633, CHEM 634, CHEM 635, CHEM 636, CHEM 637, CHEM 638, CHEM 639, CHEM 640, CHEM 641, CHEM 642, CHEM 643, CHEM 644, CHEM 645, CHEM 646, CHEM 647, CHEM 648, CHEM 649, CHEM 650, CHEM 651, CHEM 652, CHEM 653, CHEM 654, CHEM 655, CHEM 656, CHEM 657, CHEM 658, CHEM 659, CHEM 660, CHEM 661, CHEM 662, CHEM 663, CHEM 664, CHEM 665, CHEM 666, CHEM 667, CHEM 668, CHEM 669, CHEM 670, CHEM 671, CHEM 672, CHEM 673, CHEM 674, CHEM 675, CHEM 676, CHEM 677, CHEM 678, CHEM 679, CHEM 680, CHEM 681, CHEM 682, CHEM 683, CHEM 684, CHEM 685, CHEM 686, CHEM 687, CHEM 688, CHEM 689, CHEM 690, CHEM 691, CHEM 692, CHEM 693, CHEM 694, CHEM 695, CHEM 696, CHEM 697, CHEM 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998, CHEM 999, CHEM 1000.