



2+2 Degree Plan Checklist

Associate of Science in Liberal Arts and Sciences Bachelor of Science in Mathematics – Applied Mathematics



Pulaski Technical College Associate of Science in Liberal Arts and Sciences¹

| Possible Prerequisites | | | Semester | Hours | Grade |
|------------------------|------|----------------------------------|----------|-------|-------|
| DEVE | 0314 | Reading Improvement | | N/C | |
| DEVE | 0316 | College Reading | | N/C | |
| DEVE | 0322 | English Skills | | N/C | |
| DEVE | 0324 | English Composition Fundamentals | | N/C | |
| DEVE | 0334 | Pre-Algebra Skills | | N/C | |
| DEVE | 0336 | Elementary Algebra | | N/C | |
| DEVE | 0338 | Intermediate Algebra | | N/C | |

General Education Requirements (35 credit hours)

| English/Communications (9 credit hours) | | | UCA ² | Semester | Hours | Grade |
|---|------|------------------------|------------------|----------|-------|-------|
| ENGL | 1311 | English Composition I | WRTG 1310 | | 3 | |
| ENGL | 1312 | English Composition II | WRTG 1320 | | 3 | |
| COMM | 1300 | Speech Communication | SPCH 1300 | | 3 | |

| Mathematics (3 credit hours) | | | UCA | Semester | Hours | Grade |
|------------------------------|------|-----------------|-----------|----------|-------|-------|
| MATH | 1302 | College Algebra | MATH 1390 | | 3 | |

| Sciences (8 credit hours) | | | UCA | Semester | Hours | Grade |
|---------------------------|------|-------------------------------|-----------|----------|-------|-------|
| BIOL | 1400 | Biology for General Education | BIOL 1400 | | 4 | |
| PHYS | 1401 | Physical Science | PHYS 1400 | | 4 | |

| Literature (3 credit hours) | | | UCA | Semester | Hours | Grade |
|-----------------------------|------|--|-----------|----------|-------|-------|
| ENGL | 2337 | World Literature from the Beginning to 1650 or | ENGL 2305 | | 3 | |
| ENGL | 2338 | World Literature from 1650 to the Present | ENGL 2306 | | | |

| Humanities (3 credit hours) | | | UCA | Semester | Hours | Grade |
|-----------------------------|------|--------------------------------|-----------|----------|-------|-------|
| ARTS | 2300 | Introduction to Visual Arts or | ART 2300 | | 3 | |
| MUSC | 2300 | Introduction to Music or | MUS 2300 | | | |
| PHIL | 1310 | Introduction to Philosophy or | PHIL 1301 | | | |
| THEA | 2300 | Introduction to Theatre | THEA 2300 | | | |

| History/Government (3 credit hours) | | | UCA | Semester | Hours | Grade |
|-------------------------------------|------|------------------------------|-----------|----------|-------|-------|
| HIST | 2311 | U.S. History to 1877 or | HIST 2301 | | 3 | |
| HIST | 2312 | U.S. History since 1877 or | HIST 2302 | | | |
| POLS | 1310 | American National Government | PSCI 1330 | | | |

| Social Science (6 credit hours) | | | UCA | Semester | Hours | Grade |
|---------------------------------|------|-------------------------------------|-----------|----------|-------|-------|
| GEOG | 1310 | Physical Geography or | GEOG 1315 | | 6 | |
| GEOG | 2310 | Cultural Geography or | GEOG 1320 | | | |
| HIST | 1311 | History of Civilization I or | HIST 1310 | | | |
| HIST | 1312 | History of Civilization II or | HIST 1320 | | | |
| PSYC | 2300 | Psychology and the Human Experience | PSYC 1300 | | | |
| SOCI | 2300 | Introduction to Sociology | SOC 1300 | | | |

Mathematics Foundation Courses & Ancillary BS Requirement (25 credit hours)

| | | | UCA | Semester | Hours | Grade |
|------|------|--|-----------|----------|-------|-------|
| ECON | 2322 | Principles of Economics I ³ | ECON 2321 | | 3 | |
| ECON | 2323 | Principles of Economics II | ECON 2320 | | 3 | |
| MATH | 1303 | Trigonometry | MATH 1392 | | 3 | |
| MATH | 1404 | Calculus I | MATH 1496 | | 4 | |
| MATH | 1405 | Calculus II | MATH 1497 | | 4 | |
| | | General Elective | | | 3 | |
| | | General Elective | | | 3 | |
| | | General Elective | | | 2 | |

Total Hours: 60⁴



2+2 Degree Plan Checklist
Associate of Science in Liberal Arts and Sciences
Bachelor of Science in Mathematics – Applied Mathematics



University of Central Arkansas
Bachelor of Science in Mathematics (Applied Mathematics)
UCA Courses (60 credit hours)⁵

| | | | Semester | Hours | Grade |
|------|------|--|----------|-------|-------|
| MATH | 2335 | Transition to Advanced Mathematics | | 3 | |
| MATH | 2441 | Mathematical Computation | | 4 | |
| MATH | 2471 | Calculus III | | 4 | |
| MATH | 3320 | Linear Algebra | | 3 | |
| MATH | 3331 | Ordinary Differential Equations | | 3 | |
| MATH | 4306 | Modeling and Simulation | | 3 | |
| MATH | 4371 | Introduction to Probability | | 3 | |
| MATH | 4372 | Introduction to Statistical Inference | | 3 | |
| MATH | 4315 | Choose one: Introduction to Partial Differential Equations | | 3 | |
| MATH | 4340 | Numerical Methods | | | |
| MATH | 4373 | Regression Analysis | | | |
| | | Math Major Elective (4000 Level – from Approved List – See your Advisor) | | 3 | |
| | | Math Major Elective (4000 Level – from Approved List – See your Advisor) | | 3 | |
| | | Upper Division Minor Field Course | | 3 | |
| | | Upper Division Minor Field Course | | 3 | |
| | | Upper Division Minor Field Course | | 3 | |
| | | Upper Division Minor Field Course | | 3 | |
| | | Upper Division Minor Field Course | | 3 | |
| | | Upper Division Minor Field Course | | 3 | |
| | | Minor Field Course | | 3 | |
| | | Minor Field Course | | 3 | |
| | | General Elective | | 1 | |

Total Hours: 120⁶

¹ See your PTC advisor for degree and graduation information.

² UCA transfer course designations are either guaranteed by ACTS (acts.adhe.edu) or have been approved as a substitution by UCA. Unless otherwise noted, courses for which no UCA equivalent course is listed would transfer in as elective credit.

³ PHYS 1402 (UCA: PHYS 1410) and PHYS 1403 (UCA: PHYS 1420) or CHEM 1405 (UCA: CHEM 1450) and CHEM 1406 (UCA: CHEM 1451) can also be used to fulfill this ancillary BS requirement (general elective credits may need to be adjusted based upon the courses chosen to fulfill this requirement). Please see your advisor if you have questions.

⁴ Students completing the AS in Liberal Arts and Sciences degree requirements, as shown above, with a minimum 2.0 cumulative GPA, will have satisfied the UCA Lower-Division Core requirements and will be admitted to the BS in Mathematics (Applied Mathematics) degree program as a junior.

⁵ For more specific information about degree requirements within the junior and senior years at UCA, please review the UCA Undergraduate Bulletin (<http://uca.edu/ubulletin>) and consult your UCA academic advisor.

⁶ This degree program requires a total of 120 semester credit hours, including at least 40 upper-division credit hours.