UNIVERSITY OF ARKANSAS AT LITTLE ROCK

# Pre-Med and Pre-DO Prerequisite Checklist

**STUDENT:**

**ADVISORS:** Dr. Anindya Ghosh (axghosh@ualr.edu) and Dr. Erin Flowers (eeflowers@ualr.edu)

**UPDATED:** October 2026 (UA Little Rock five-digit course numbers)

**AIMING FOR:** ☐ MD ☐ DO ☐ Both **Applying in:** **MCAT date:**

This checklist covers the four medical schools in Arkansas: two MD schools and two DO schools. If you complete the course list in Part C **with all the labs**, you will meet the prerequisites of all four and of most schools elsewhere. Every school requires a bachelor's degree (or at least 90 hours at ARCOM). Courses are listed by their current UA Little Rock numbers; check prerequisites and terms offered in the catalog and class schedule. **For advising, contact Dr. Ghosh (axghosh@ualr.edu); if he can't meet or is slow to respond, reach out to Dr. Flowers (eeflowers@ualr.edu).** We run the program together. Department contacts are listed at the end. **Keep this checklist current: you will submit it with your UA Little Rock committee letter application.**

*Tip: open this file in Adobe Acrobat Reader, Preview or your browser, click the boxes to check off courses, type in the fields, and save. You can update it at every advising meeting.*

## Part A. Pre-Med: MD schools in Arkansas (apply through AMCAS)

| | UAMS College of Medicine (Little Rock, Fayetteville) | Alice L. Walton School of Medicine (Bentonville) |
|---|---|---|
| Required courses | Biology 3 semesters incl. Genetics; Chemistry 3 incl. Organic and Biochemistry; Physics 2; Statistics 1; English 2; Social sciences 2 | No specific courses; at least 24 hours of biology, chemistry, physics and math (AP/IB not counted) |
| Labs | Not required for Organic or Biochemistry | Not specified |
| MCAT | 500+ Arkansas residents; 505+ non-residents; within 3 years | 500+ minimum; within 4 years of starting |
| GPA | No minimum; 2025 entering class averaged 3.83 (MCAT 509) | 3.4 overall and 3.4 science (BCPM) minimum |
| Letters | UA Little Rock committee letter (required) plus faculty letters; up to 3 personal letters | 3–5 letters, or one committee letter |
| Other | Strong preference for Arkansas residents; AP and online courses count if on transcript; CLEP does not | PREview exam highly recommended; tuition waived for classes entering through 2029 |

Alice L. Walton details come from a third-party summary; confirm on the school's site.

## Part B. Pre-DO: osteopathic schools in Arkansas (apply through AACOMAS)

| | ARCOM (Fort Smith) | NYITCOM at Arkansas State (Jonesboro) |
|---|---|---|
| Biology | 8 hrs with lab | 8 hrs with lab |
| General chemistry | 8 hrs with lab | 8 hrs with lab |
| Organic chemistry | 8 hrs with lab | Organic I and II with labs (Biochemistry may replace Organic II) |

| | ARCOM (Fort Smith) | NYITCOM at Arkansas State (Jonesboro) |
|---|---|---|
| Biochemistry | 3 hrs | Recommended |
| Physics | 8 hrs with lab | 8 hrs with lab |
| English | 6 hrs (composition and literature) | 6 hrs |
| Other courses | 4 hrs additional science | Recommended: behavioral science, genetics, A&P, microbiology, statistics |
| MCAT and GPA | No minimum; competitive applicants usually have 3.5+ GPA, 3.4+ science GPA, MCAT 500+ | MCAT required; check the current score window |
| Letters | Physician letter (DO preferred) plus a committee letter or two science faculty letters | See school; a DO letter strengthens any DO application |

- **Labs are required** for DO schools, so take every lab in Part C.
- **Shadow a DO** and ask that physician for a letter; many DO schools want one.
- Both schools give weight to applicants from Arkansas and rural or underserved backgrounds (ARCOM states this preference).

## Part C. Course checklist (meets both MD and DO requirements)

Check off each course as you complete it. The labs marked below are what keep both MD and DO schools open.

### Biology (UAMS: 3 semesters, including Genetics; DO: 8 hours with lab)

| | Course (credit hours) | Prerequisite | Term / grade |
|---|---|---|---|
| ☐ | BIOL 10284 Biological Concepts I (4) **or** BIOL 10104 Science of Biology (4) | None | |
| ☐ | BIOL 20194 Microbiology (4) (recommended by UAMS) | Intro biology and a chemistry course | |
| ☐ | BIOL 30883 Genetics (3) **required** | Intro biology, Microbiology and chemistry | |
| ☐ | BIOL 30091 Genetics Laboratory (1) (recommended) | With or after Genetics | |

**Recommended upper-level biology** (UAMS recommends physiology, microbiology, cell biology, neuroscience, histology, immunology, developmental and molecular biology):

| | Course (credit hours) | Prerequisite | Term / grade |
|---|---|---|---|
| ☐ | BIOL 40694 Cell Biology (4); heavily tested on the MCAT | See catalog | |
| ☐ | BIOL 42284 Human Physiology (4) | See catalog | |
| ☐ | BIOL 30294 Human Anatomy (4) | See catalog | |
| ☐ | BIOL 41784 Molecular Biology (4) | See catalog | |
| ☐ | BIOL 41384 Immunology (4) or BIOL 41193 Neurobiology (3) | See catalog | |

| | Course (credit hours) | Prerequisite | Term / grade |
|---|---|---|---|
| ☐ | BIOL 30084 Developmental Biology (4) or BIOL 30894 Vertebrate Histology (4) | See catalog | |

**Anatomy and physiology are good options.** BIOL 24004 and 24104 Introduction to Human Anatomy and Physiology I and II (4 each) build strong MCAT and medical school background and count as biology in your AMCAS science GPA. Confirm with UAMS whether a particular A&P course counts toward its three biology semesters.

## Chemistry (UAMS: 3 semesters incl. Organic and Biochemistry; DO: General and Organic with labs)

| | Course (credit hours) | Prerequisite | Term / grade |
|---|---|---|---|
| ☐ | CHEM 13003 General Chemistry I (3) + CHEM 11001 Lab (1) | College Algebra or chemistry placement (see catalog) | |
| ☐ | CHEM 14203 General Chemistry II (3) + CHEM 14201 Lab (1) | General Chemistry I | |
| ☐ | CHEM 36053 Organic Chemistry I (3) + CHEM 36051 Lab (1) | General Chemistry II | |
| ☐ | CHEM 36203 Organic Chemistry II (3) + CHEM 36201 Lab (1) | Organic Chemistry I; Lab I required for Lab II | |
| ☐ | CHEM 42133 Biochemistry I (3) **required**; CHEM 42031 Lab (1) optional | Organic Chemistry I and II with labs | |

UAMS does not require labs for Organic Chemistry or Biochemistry, but UA Little Rock requires Organic Lab I before Lab II, and DO schools require chemistry with labs, so take them. Some degree plans list combined 4-hour versions (CHEM 10234 General Chemistry I, CHEM 14204 General Chemistry II). UA Little Rock does not offer Biochemistry II.

## Physics (2 semesters; DO: with labs)

| | Course (credit hours) | Prerequisite | Term / grade |
|---|---|---|---|
| ☐ | PHYS 20103 College Physics I (3) + PHYS 20101 Lab (1) | See catalog | |
| ☐ | PHYS 20203 College Physics II (3) + PHYS 20201 Lab (1) | College Physics I | |

Chemistry, physics and engineering majors may take calculus-based Physics for Scientists and Engineers I and II instead (PHYS 20303/20331, PHYS 20403/20431); UAMS accepts these. Labs are optional for UAMS but required by DO schools.

## Statistics: 1 semester

| | Course (credit hours) | Prerequisite | Term / grade |
|---|---|---|---|
| ☐ | MATH 21003 Introduction to Statistical Methods (3) (formerly STAT 2350; also meets Core Math) | See catalog | |
| ☐ | **or** PSYC 33554 Statistics and Methods I (4), or STAT 35203 Applied Statistics I (3) | See catalog | |

UAMS accepts any introductory statistics course.

## English: 2 semesters

| | Course (credit hours) | Prerequisite | Term / grade |
|---|---|---|---|
| ☐ | ENGL 10103 Composition I (3) (formerly RHET 1311) | Placement | |
| ☐ | ENGL 10203 Composition II (3) (formerly RHET 1312) | Composition I | |

AP English counts if it is on your transcript. Literature, creative writing and other ENGL courses also count, and Donaghey Scholars' Rhetoric and Communication courses can help meet this requirement.

## Social sciences: 2 semesters

| | Course (credit hours) | Prerequisite | Term / grade |
|---|---|---|---|
| ☐ | PSYC 20043 Psychology and the Human Experience (3) (formerly PSYC 2300) | None | |
| ☐ | SOCI 10103 Introduction to Sociology (3) (formerly SOCI 2300) | None | |
| ☐ | Other options: PHIL 23093 Ethics and Society, PHIL 33533 Medical Ethics, ANTH 20103 Understanding Cultures | See catalog | |

UAMS strongly recommends psychology and sociology; anthropology, ethics, logic, philosophy, religion and theology are also accepted. For the MCAT, an upper-level psychology course helps: PSYC 30203 Abnormal Psychology, PSYC 31003 Cognitive Psychology or PSYC 41333 Physiological Psychology.

## Experiences and plans

| Item | Notes (hours, places, dates) |
|---|---|
| MCAT date / score | |
| Clinical experience (target 100–200+ hrs) | |
| Physician shadowing, MD and DO (target 40–50+ hrs) | |

| Item | Notes (hours, places, dates) |
|---|---|
| Non-clinical volunteering (target 100+ hrs) | |
| Research | |
| Leadership | |
| Schools you plan to apply to | |
| Other experiences, languages, certifications | |

## Department and campus contacts

For more information on prerequisites and course content, transfer equivalencies, finding classes, and connecting with professors (please keep Dr. Ghosh or Dr. Flowers informed):

| Contact | Email | Ask about |
|---|---|---|
| Dr. Sinead Ni Chadhain, Biology Chair | snichadhain@ualr.edu | Biology courses and transfer equivalencies |
| Dr. Juliette Rivero, Chemistry | jxriverocas@ualr.edu | Chemistry courses and sequencing |
| Dr. Georgy Guisbiers, Physics | gxguisbiers@ualr.edu | Physics courses and sequencing |
| Office of Transfer Student Services | transfer@ualr.edu; 501-916-3273 | Articulating courses from other colleges |
| Jesse Cargill, UAMS Director of Admissions | JACargill@uams.edu | Whether a specific course meets UAMS prerequisites |