



COLLEGE OF ARTS & SCIENCES
OKLAHOMA STATE UNIVERSITY

Requirements for Students **Matriculating** in or before Academic Year 2017-2018

BACHELOR of SCIENCE

MAJOR: Mathematics

OPTION: Applied Mathematics

Minimum Overall Grade Point Average: 2.00

Total Hours: 120

(cumulative graduation/retention GPA)

Other GPA requirements, see below.

GENERAL EDUCATION REQUIREMENTS: 41 HOURS			MAJOR REQUIREMENTS: 50 HOURS		
Area	Hours	To be selected from:	Minimum GPA <u>2.00</u> with a minimum grade of "C" or "P" in each course in Major Requirements and each required MATH course. Mathematics Core: 38 hours MATH 2163, 2233, and 3013; and 3613 or 4023 2-3 hours from: CS 2133 or 2433 or ENGR 1412 3 hours from: STAT 4013 or 4033 or 4053 MATH 3583 and 4513; and MATH 4263 or 4553 9 hours from the following, with at least 3 hours from each group and no more than 3 hours outside MATH: Analysis: MATH 4013, 4023, 4143, 4233, 4263, 4283, 4343, 4423, 5213, PHYS 3513, STAT 4203 Applied Algebra/Discrete Math: MATH 4063, 4453, 4553, 4663, 4713, 4753, 4813, CS 3653 3 hours from: 4000-level courses in MATH or STAT or upper division CS Area of Application: 9 hours from one of the following; an alternative 9 hour plan with at least 6 upper division hours may be used with Departmental approval. <i>Agricultural Economics:</i> AGECE 3213, 3333, and 4213 or 4333 <i>Bioinformatics:</i> CHEM 1515, MICR 3033 and 4203 <i>Cognitive Science:</i> CS 4793; PHIL 4003 or 4313 or 4543; PSYC 3173 <i>Ecology:</i> BIOL 1604; BIOL 3034; 3 hours from upper division BIOL <i>Economics:</i> ECON 2203; 3113 or 3123; 3 hours from upper division ECON <i>Finance:</i> FIN 3113; 6 hours from FIN 4223, 4333, 4763 <i>GIS:</i> GEOG 4203; 4343 or 4353; 3 hours from 3333, 4333, 4383 <i>Geophysical Analysis:</i> ENSC 2113, 3223, and GEOL 4103 <i>Network and Signal Analysis:</i> ENSC 2613, ECEN 2011, 3714; 3513 or 3613 <i>Operations Research:</i> IEM 4013, 4713; 3 hours from IEM 4103, 4113, 4613, 4623 <i>Physics:</i> 9 hours upper division PHYS Capstone Experience: 3 hours from a project or internship applying mathematical methods to a problem in the area of application. MATH 4973 or 4993 or 4590 (3 hours) with approval of advisor and internship mentor.		
English Composition	6	ENGL 1113 (or 1313) and ENGL 1213 (or 1413 or 3323) (See Academic Regulation 3.5 in Catalog)			
American History & Government	6	HIST 1103 and POLS 1113			
Analytical & Quantitative Thought (A)	7	MATH 2144* and CS 1113*			
Humanities (H)	6	Courses designated (H)			
Natural Sciences (N) Must include one Laboratory Science (L) course.	6	PHYS 2014* and a course designated (N)			
Social & Behavioral Sciences (S)	3	ECON 2103* or AGECE 1113*			
Additional General Education	7	Courses designated (A), (H), (N), or (S)			
*College and Departmental Requirements that may be used to meet Gen Ed Requirements.					
DIVERSITY (D) & INTERNATIONAL DIMENSION (I) May be completed in any part of the degree plan.					
At least one Diversity (D) course: (_____)					
At least one International Dimension (I) course (_____)					
COLLEGE/DEPARTMENTAL REQUIREMENTS: 13 HOURS					
First Year Seminar	1	A&S 1111 (transfer students with 15 hours exempt)			
Arts & Humanities	3	_____ (see note 2.a.)			
Natural & Mathematical Sciences	9	MATH 2153; and PHYS 2114; and 2 additional hours			
Foreign Language	0-6	_____ (see note 3.)			
Upper-Division General Education 6 hours outside major department		_____ (see note 2.c.)			
Other Requirements: See notes 1, 2 & 3 on back of degree sheet Upper-Division Credit: Total hours must include at least 40 hours in courses numbered 3000 or above. Hours in One Department: Hours in one department in excess of 54 will be added to the minimum total of 120 required for graduation.					
Additional State/OSU Requirements – At least: 60 hours at a four-year institution; 30 hours completed at OSU; 15 of the final 30 or 50% of the upper-division hours in the major field completed at OSU. Limit of: one-half of major course requirements as transfer work; one-fourth of hours earned by correspondence; 8 transfer correspondence hours. Students will be held responsible for degree requirements in effect at the time of matriculation and any changes that are made, so long as these changes do not result in semester credit hours being added or do not delay graduation. Degrees that follow this plan must be completed by the end of Summer 2023.					

Signature on file in the Office of the Registrar.

Signature on file in the Office of the Registrar

DEAN

DEPARTMENT HEAD

College of Arts and Sciences

1. GENERAL EDUCATION REQUIREMENTS

No more than two courses (or eight hours) from the major department may be used to meet General Education and College and Departmental Requirements. The General Education required English Composition, required U.S. History, required American Government, one required MATH or STAT course, and required foreign language for B.A. degrees do not count against the two-course maximum.

2. A&S COLLEGE/DEPARTMENTAL REQUIREMENTS

- a. Arts and Humanities are defined as any course carrying an (H) designation or courses from AMST, ART, DANC, ENGL (except 3323) HIST, MUSI, PHIL (except 1313, 3003 and 4003), REL, TH, and foreign languages.
- b. Natural and Mathematical Sciences are defined as any course from the following prefixes: ASTR, BIOC, BIOL, BOT, CHEM, CS (except 4883), GEOL, MATH, MICR, PHYS, and STAT; or courses from other departments that carry an (A) or (N) general education designation.
- c. The required six hours of upper-division General Education may not include courses from the student's major department. This requirement may be satisfied by courses also used to satisfy any part of a student's degree program (i.e., in General Education, College Departmental Requirements, Major Requirements or Electives).
- d. Non-Western Studies Requirement for B.A. and B.F.A. One 3-hour course in Non-Western Studies from: AMIS 2013, 4013; ANTH 3443, 4223; ART 2693, 2733, 4603, 4653, 4663, 4673, 4683, 4703, 4713, 4763; CHIN 1225; ENGL 2963, 3183, 3190 (African Novel), 4330; FLL 1000 (Arabic 2 & Muskoke2); GEOG 3053, 3733, 3753, 3763, 3783; HIST 1713, 3003, 3013, 3043, 3053, 3123, 3133, 3153, 3163, 3203, 3403, 3413, 3423, 3433, 3443, 3503, 3513, 3523, 3543, 3553, 3583, 3793; HONR 3033; JAPN 1225, 2015, 2225; MUSI 3583; PHIL 3943, 4943, 4953; POLS 3003, 3053, 3123, 3163, 3223, 3313; REL 1103, 3573, 4113, 4213, 4223; RUSS 1225, 3003, 3053, 3123, 4013, 4023, 4113, 4123; SOC 4533, 4653. This requirement may be satisfied by courses also used to satisfy any part of a student's degree program (i.e., in General Education, College Departmental Requirements, Major Requirements or Electives).
- e. The College of Arts & Sciences requires a minimum 2.0 GPA in all major requirements and a minimum 2.0 GPA in all major-prefix courses.

3. FOREIGN LANGUAGE PROFICIENCY

- a. The foreign language requirement for the B.A. may be satisfied by 9 hours college credit in the same language, which must include 3 hours at the 2000-level, or equivalent proficiency (e.g., passing an advanced standing examination; TOEFL exam; presenting a high school transcript which demonstrates the high school was primarily conducted in a language other than English; etc.). Computer Science courses may not be used to satisfy this requirement. Currently Arabic and Muskoke are not offered at the 2000-level at OSU.
- b. The foreign language requirement for the B.S., B.M. and B.F.A. may be satisfied by presenting a high school transcript which demonstrates two years of study of a single foreign language (passing grades at second year level of study). It may also be satisfied by 6 hours college credit in the same language, which must include language courses 1713 and 1813, or equivalent proficiency (e.g., passing an advanced standing examination; TOEFL exam; presenting a high school transcript which demonstrates the high school was primarily conducted in a language other than English; etc.). Computer Science courses may not be used to satisfy this requirement.
- c. In addition to a. and b., **students pursuing teacher certification** must meet novice-high foreign language proficiency by presenting a high school transcript which demonstrates two years of study of a single foreign language with no grade below B. Or, students may complete 3 hours college credit in a single language with no grade below C (or pass an advanced standing examination, College Level Examination Program (CLEP) exam, or Oral Proficiency Interview developed by the American Council on the Teaching of Foreign Languages, equivalent to 3 hours of college credit.) Or, students may meet the requirement by transfer of documentation of meeting the foreign language competency from one of the teacher education programs in the State of Oklahoma approved by the Oklahoma State Regents for Higher Education.

4. EXCLUSIONS

- a. Courses used to satisfy the General Education English Composition, U.S. History, American Government, and Mathematics or Statistics requirements will not count toward the 54 hour maximum allowed from one department.
- b. Courses with ATHL or LEIS prefixes and leisure activity courses may not be used for degree credit.

5. TEACHER CERTIFICATION

Students can satisfy the requirements for secondary schools teaching certification while earning a B.A. or B.S. in the College of Arts & Sciences. Those interested should see their Arts and Sciences adviser and the OSU Professional Education Unit in room 325 Willard.