Program Completion Plan (Eight Semester Plan)

Department: Mathematics **Degree:** BS

Program/Major: Mathematics

Track/Emphasis: Pure Mathematics

Does this program require a minor? (Yes/No) Yes

Important program information in the online *Undergraduate Bulletin*:

UCA Core Requirements: http://uca.edu/ubulletin2013/general-policies-information/uca-core/

Degree Requirements: http://uca.edu/ubulletin2013/general-policies-information/degree-requirements/

Program Description: http://uca.edu/ubulletin2013/colleges-departments-programs/college-of-natural-sciences-and-mathematics/department-of-mathematics/

Course Descriptions: http://uca.edu/ubulletin2013/courses/

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

Comparable courses in the Arkansas Course Transfer System (ACTS) are cross-referenced in the ACTS column of each semester block below; a core link (http://uca.edu/go/ubulletin-ldcore/) takes the user to the *Undergraduate Bulletin*'s UCA Core page, where UCA Core options and ACTS course numbers are listed in full; an acts link takes the user to the *Undergraduate Bulletin*'s ACTS page (http://uca.edu/go/acts) for additional information and a full UCA-ACTS crosswalk.

Year 1

Fall – Semester 1 (credit hours: 16)

SUBJ	NUM	TITLE	SCH	ACTS
MATH	1496	Calculus I	4	MATH2405
		UCA Core (Writing Foundation)[1]	3	core link
		UCA Core (American History and Government)[1]	3	core link
		UCA Core[1]	3	core link
		UCA Core (Social Sciences)[1]	3	core link

Spring – Semester 2 (credit hours: 14)

SUBJ	NUM	TITLE	SCH	ACTS
MATH	1497	Calculus II	4	MATH2505
		UCA Core (Research and Writing)	3	core link
		UCA Core[1]	3	core link
		UCA Core (Life Science)	4	core link

Year 2

Fall – Semester 3 (credit hours: 14)

SUBJ	NUM	TITLE	SCH	ACTS
MATH	2335	Transition to Advanced Mathematics	3	
MATH	2471	Calculus III	4	MATH2603
		UCA Core (Oral Communication)	3	core link
		UCA Core (Physical Science)	4	core link

Spring – Semester 4 (credit hours: 15)

SUBJ	NUM	TITLE	SCH	ACTS
MATH	3320	Linear Algebra	3	
MATH	3331	Differential Equations	3	
		UCA Core	3	core link
		UCA Core	3	core link
		Minor Field Course[2,3]	3	

Year 3

Fall – Semester 5 (credit hours: 15)

SUBJ	NUM	TITLE	SCH	ACTS
MATH	3360	Abstract Algebra I	3	
MATH	4371	Introduction to Probability	3	
MATH		MATH Major Elective	3	
		General Elective	3	
		Minor Field[2,]	3	

Spring – Semester 6 (credit hours: 15)

SUBJ	NUM	TITLE	SCH	ACTS
MATH	3362	Abstract Algebra II	3	
MATH		MATH Major Elective	3	
		General Elective	3	
		Minor Field[2,]	3	
		Minor Field[2,]	3	

Year 4

Fall – Semester 7 (Credit hours: 16)

SUBJ	NUM	TITLE	SCH	ACTS
MATH	4362	Advanced Calculus I	3	
		General Elective	3	
		General Elective	4	
		Minor Field[2,]	3	
		Minor Field[2,]	3	

Spring – Semester 8 (Credit hours: 15)

SUBJ	NUM	TITLE	SCH	ACTS
		General Elective	3	
		General Elective	3	
		General Elective	3	
		Minor Field[2,]	3	
		Minor Field[2,]	3	

SIGNED – DEPARTMENT CHAIR _____ DATE _____

SIGNED – COLLEGE DEAN _____ DATE _____

To be completed by the advisor when an Eight-Semester Plan is accepted by the student:

If applicable, has student selected a minor? Type "x" as appropriate. _____ No _____ Yes
If "yes," specify: _____

Notes

[1] See appropriate choices, alternatives, or substitutions under "UCA Core" in the *Undergraduate Bulletin*. During the first year, a student must complete a UCA Core course designated as a First-Year Seminar (FYS) in Critical Inquiry, Diversity, or Responsible Living. The student will also need to complete major, minor, or general elective courses designated as fulfilling the upper-division and capstone requirements of the UCA Core.

[2] This Program Completion Plan includes 24 credit hours in the Minor field of study. Minor requirements range from 15 - 31 credit hours, so the student will need to adapt the number of general elective and minor elective credit hours in this plan as needed, depending upon the chosen minor field. **Given a student's choice of minor and special degree requirements, the total number of credit-hours taken may exceed the total number of credit hours required to complete the program**.

[3] The pure mathematics major requires 24 hours of upper division courses. The additional 16 upper division credit hours needed to complete the degree may be met by minor filed courses and additional math or general electives.