

B.S. in MATHEMATICS (Pure Mathematics Concentration) Suggested 4-Year Academic Flowchart

Updated 6/2/2015						1					
FRESHMAN			SOPHOMORE			JUNIOR			SENIOR		
Fall Calculus I MATH 141 (4) * [B1]	Winter Calculus II MATH 142 (4) (MATH 141 w/min C- or Instr. Consent) [B1]	Spring Calculus III MATH 143 (4) (MATH 142 w/min C- or Instr. Consent)	Fall Calculus IV MATH 241 (4) (MATH 143)	Winter Linear Algebra I MATH 206 (4) (MATH 143)	Spring Differential Equations I MATH 242 (4) (MATH 206 & 241)	Fall Combinatorial Mathematics MATH 336 (4) (MATH 248 or Jr Standing)	Winter Abstract Algebra I MATH 481 (4) (MATH 306 or MATH 341)	Spring Abstract Algebra II MATH 482 (4) (MATH 481)	Fall Senior Seminar MATH 459 or Applied Math Senior Seminar MATH 460 (4) *	Winter Senior Project I MATH 461 (2) (Sr Standing)	Spring Senior Project II MATH 462 (2) (MATH 461)
GE (4) **	GE (4) **	CSC / MATH / STAT Elective (4) ³ *	Orientation to Mathematics Major MATH 202 (1) (MATH 143)	Methods of Proof in Mathematics MATH 248 (4) (MATH 143)	Linear Algebra II MATH 306 (4) (MATH 206 or 244; 241; 248 w/min C-, or Instr Consent)	Introduction to Analysis I MATH 412 (4) (MATH 306)	Introduction to Analysis II MATH 413 (4) (MATH 412)	Depth/MATH Elective (4) ¹ *	Complex Analysis I MATH 408 (4) (MATH 242, or MATH 241 and 244)	Topology I MATH 440 (4) (MATH 412. Coreq: MATH 481)	MATH Elective (4) ² *
GE (4) **	Free Elective (1)	Free Elective (4)	General Physics IA PHYS 141 (4) ⁴ (MATH 141 w/min C-; MATH 142 or 182. Recom: HS physics)	General Physics II or III PHYS 132 or 133 (4) ⁴ * [B3/B4]	MATH Elective (4) ² *	MATH Elective	Depth/MATH Elective (4) ¹ *	CSC / MATH / STAT Elective (4) ³ *	GE (4) **	Depth/MATH Elective (4) ¹ *	GE (4) **
Expository Writing ENGL 133 or 134 (4)** [A1] Can be taken anytime during Freshman Year Oral Communication COMS 101 or 102 (4)** [A2] Can be taken anytime during Freshman Year			GE (4) **	GE (4) **	GE (4) **	Free Elective (4)	GE (4) **	GE (4) **	Free Elective (2)	GE (4) **	GE (4) **
Reasoning, Argumentation, & Writing [A3] COMS 126; COMS / ENGL 145; ENGL 148; PHIL 126 (4)** (Completion of GE A1 with a C- or better) Can be taken anytime between Winter of Freshman and Winter of Sophomore Years.					Graduation Writing Requirement GWR* (Students can attempt to fulfill the requirement after 90 earned units; students should complete the requirement before senior year)						
16	13	16	13	16	16	16	16	16	14	14	14

Notes:

MOST GENERAL EDUCATION COURSES CAN BE TAKEN IN ANY ORDER AS LONG AS PREREQUISITES ARE MET

* Refer to current catalog for prerequisites.

** One course from each of the following GE areas must be completed: A1, A2, A3, B2, C1, C2, C3, C4, C1-C5 elective, D1, D2, D3, D4, D5 and F. C4, D5 and F should be taken only after Junior standing is reached (90 units).

Refer to online catalog for GE course selection, United States Cultural Pluralism (USCP) and Graduation Writing Requirement (GWR).

USCP requirement can be satisfied by some (but not all) courses within GE categories: C3, C4, D1, D3, D4, D5 or F.

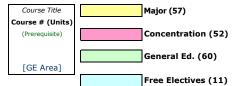
¹ Depth Work must include three of the following: MATH 406, 409, 414, 435, 441.

² Math electives must include three of the following: MATH 304, 335, 341, 344, 350, 404, 406, 409, 414, 416, 418, 435, 436, 437, 441, 451, 452, 453, 470. ³ Choose two courses from the following: CSC/CPE 101; MATH 350; STAT 301, 305 or 425. If you decide not to take CSC 101,

then you may consider taking the PHYS sequence in your Freshman year.

⁴ The PHYS/CSC course sequences may be taken in either order depending on your interests.

Legend:



TOTAL:

180