THE UNIVERSITY OF PUGET SOUND

2019-2020 CURRICULUM GUIDE

MATHEMATICS DEGREE: BS

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A suggested four-year program for Standard Option:

<u>Fall Semester Classes</u> <u>Spring Semester Classes</u>					
Freshman	Units		Units		
SSI 1	1	SSI 2	1		
MATH 180 (MA core)	1	MATH 181	1		
CSCI 161* or Approaches Core	1	Approaches Core	1		
FL (if needed) or elective	1	FL (if needed) or elective	1		
Sophomore	Units		Units		
MATH 280	1	MATH 290	1		
CSCI 161* or Approaches Core	1	Approaches core	1		
Elective	1	Elective	1		
Elective	1	Elective	1		
Junior	Units		Units		
MATH 300-400 level ¹	1	MATH 300-400 level ¹	1		
Approaches core	1	MATH 300-400 level ²	1		
Elective	1	Elective	1		
Elective	1	Elective	1		
Senior	Units	, ,	Units		
MATH 300-400 level ³	1	MATH 300-400 level ³	1		
Elective	1	Elective	1		
CN core [#]	1	Elective	1		
Elective	1	Elective	1		

NOTES:

Puget Sound requires a total of 32 units to graduate

There are TWO options for the Mathematics major: the **contract** option and the **standard** option.

Contract option: Each contract will consist of: (1) Between eight and 16 units with no more than nine units in mathematics; (2) CSCI 161 or equivalent and (3) At least five-upper-division (300-400 level) units in mathematics to include: (a) two units of related upper-division courses to provide depth and (b) one upper-division unit in a proof-based course. Final shape is worked out in consultation with the advisor and a departmental committee before the end of the semester in which the first upper-division course on the contract is completed. The contract will normally include 180/181/280/290.

Standard option: (1) Completion of 180/181/280/290; (2) CSCI 161 and (3) At least five upper-division (300-400 level) units in mathematics to include (a) two units of related upper-division courses to provide depth; (b) one upper-division unit in a proof-based course; and (c) at least one upper-division unit from each of the following two lists: (List A) MATH 301, 302, 350, 355, 360, 375, 376, 380, 420 (some topics as noted in topic course descriptions), 480, 481 and (List B) MATH 300, 310, 335, 338, 340, 345, 390, 420 (some topics as noted in topic course descriptions), 471, 490, 491.
Upper-division units must be approved by the end of the semester in which the first upper-division course on the contract is completed. Upper-division

courses completed before the contract is approved cannot be included in the contract.

*Students majoring in mathematics should take CSCI 161 in their first two years.

#Of the three units of upper division coursework required outside the first major, the Connections course will count for one unless it is used to meet a major requirement.

Currently-offered sets of related upper-division courses to provide depth in contract and standard majors include MATH 301/302, 335/471, 340/345, 350/355, 375/376, 480/481, 490/491.

THE UNIVERSITY OF PUGET SOUND COURSE CHECKLIST MATHEMATICS

CORE CURRICULUM

UNIVERSITY CORE	CRS	TERM	GRADE
SSI 1			
SSI 2			
AR			
HM			
MA (CSCI 161, MATH 180, 181, 280)			
NS			
SL			
CN			

KEY

SSI1= Seminar in Scholarly Inquiry1MA= Mathematical ApproachesSSI2= Seminar in Scholarly Inquiry2NS= Natural Scientific ApproachesAR= Artistic ApproachesSL= Social Scientific ApproachesHM= Humanistic ApproachesCN= ConnectionsFL= Foreign Language

Foreign Language Requirement (circle one)

- 1) Two semesters at 101/102 level or One semester at 200+ level
- 2) Proficiency exam (3rd year high school level or 1st year college level)
- 3) AP foreign language score of 4 or 5
- 4) IB higher level foreign language score of 5, 6, or 7

Upper Division Level Requirement

Three units at the upper division level outside the first major.

KNOWledge, Identity, and Power Requirement

One course. See Bulletin for details. Courses may also fulfill other program or graduation requirements.

STANDARD MAJOR REQUIREMENTS¹

COURSE	UNITS	TERM	GRADE			
MATH 180						
MATH 181						
MATH 280						
MATH 290						
CSCI 161						
Five upper-division units of MATH 300-400 level:*						
1.#						
2.#						
3.##						
4. List A						
5. List B						

THIS FORM IS NOT AN OFFICIAL GRADUATION ANALYSIS

<u>NOTES</u>

Majors must maintain a minimum 2.0 GPA in all major courses and in all upper-division (300-400 level) courses.

At least four units of upper-division mathematics courses must be completed at Puget Sound. One of these four units may be taken as part of a study-abroad program. For contract majors, this is subject to prior approval by the student's contract committee.

A grade of C- or better is required in all prerequisite courses in Math and Computer Science.

Among the five upper-division units in mathematics, standard option majors must include:

#two units of related upper-division courses to provide depth (see list of courses below)

##one upper-division proof-based course

Standard mathematics majors must take at least one upper-division unit from each of the following two lists (List A and B) to provide experience in both continuous and discrete mathematics (some classes may meet more than one requirement above).

List A: MATH 301, 302, 350, 355, 360, 375, 376, 380, 420 (some topics as noted in topic course descriptions), 480, 481.

List B: MATH 300, 310, 335, 338, 340, 345, 390, 420 (some topics as noted in topic course descriptions), 471, 490, 491.

Currently-offered sets of related upper-division courses to provide depth in contract and standard majors include MATH 301/302, 335/471, 340/345, 350/355, 375/376, 480/481, 490/491.

*Contract majors must complete a minimum of eight and a maximum of 16 units with no more than nine units in mathematics. Contracts normally include the calculus sequence and linear algebra. List A and B requirements do not apply to contract majors.

Upper-division units must be approved by the end of the semester in which the first upper-division course on the contract is completed. Upper-division courses completed before the contract is approved cannot be included in the contract.