

Name:

Date:

PeopleSoft ID:

Checklist for BS in Mathematics - teachHOUSTON

Tr UH MATHEMATICS (46 Hours; MUST have 30 advanced hours):

| Tr | UH | COURSE |
|----|----|--|
| | | MATH 2413 Calculus I |
| | | MATH 2414 Calculus II |
| | | MATH 2415 Calculus III |
| | | MATH 2131 Linear Algebra Lab |
| | | MATH 2318 Linear Algebra |
| | | MATH 3311 Functions and Modeling Fall |
| | | OR MATH 3339 Statistics for the Sciences |
| | | OR MATH 3349 Inferential Statistics |
| | | MATH 3325 Transition to Advanced Mathematics |
| | | MATH 3330 Abstract Algebra |
| | | MATH 3331 Differential Equations |
| | | MATH 3333 Intermediate Analysis |
| | | MATH 3379 Introduction to Higher Geometry Spring |
| | | MATH 4389 Survey of Undergraduate Mathematics |
| | | MATH 43___ 3 hours 4000-level MATH elective |

MATH SENIOR SEQUENCE (6 Hours):

| | | |
|--|--|---|
| | | MATH 43___ 3 hours 4000-level MATH elective |
| | | MATH 43___ 3 hours 4000-level MATH elective |

Possible Senior Sequences: 4309/4310, 4322/4323, 4331/4332, 4335/4362, 4350/4351, 4364/4365, 4364/4366, 4377/4378, 4320/4380

EXAMPLES OF 4000-LEVEL MATH ELECTIVES

| | |
|-----------|---|
| MATH 4309 | Mathematical Biology |
| MATH 4310 | Biostatistics |
| MATH 4320 | Introduction to Stochastic Processes |
| MATH 4322 | Introduction to Data Science and Machine Learning |
| MATH 4323 | Data Science and Statistical Learning |
| MATH 4331 | Introduction to Real Analysis I |
| MATH 4335 | Partial Differential Equations |
| MATH 4339 | Multivariate Statistics |
| MATH 4350 | Differential Geometry |
| MATH 4351 | Calculus on Manifolds |
| MATH 4355 | Mathematics of Signal Representation |
| MATH 4362 | Theory of Differential Equations & Nonlinear Dynamics |
| MATH 4364 | Intro. to Numerical Analysis in Scientific Computing |
| MATH 4365 | Numerical Methods for Differential Equations |
| MATH 4366 | Numerical Linear Algebra |
| MATH 4377 | Advanced Linear Algebra I |
| MATH 4378 | Advanced Linear Algebra II |
| MATH 4380 | Mathematical Introduction to Options |
| MATH 4383 | Number Theory & Cryptography |
| MATH 4388 | History of Mathematics |

Bold courses are part of a senior sequence

NSM Natural Sciences (14 Hours):

| | | |
|--|--|---|
| | | 1 hr Natural Sciences Lab*** |
| | | 1 hr Natural Sciences Lab*** |
| | | 3 hours NSM Approved Natural Science*** |
| | | 3 hours NSM Approved Natural Science*** |
| | | 3 hours NSM Approved Natural Science |
| | | BIOL/CHEM/PHYS 4340 (Research Methods for teachHouston) |

***Indicates ALL courses must be in the same subject and approved for NSM majors

CORE (Check UH Catalog or UH Core Website for Pre-Requisites)

COMMUNICATION (6 Hours):

| | | |
|--|--|---------------------------------|
| | | ENGL 1301 First Year Writing I |
| | | ENGL 1302 First Year Writing II |

STATE REQUIREMENTS (12 Hours):

| | | |
|--|--|---|
| | | American History (3 Hours) |
| | | American History (3 Hours) |
| | | GOVT 2305 U.S. Government: Congress, President, and Court |
| | | GOVT 2306 U.S. and Texas Constitutions and Politics |

FROM APPROVED CORE LIST (12 Hours): Choose from UH Core Website

| | | |
|--|--|--|
| | | Language, Philosophy & Culture (3 Hours) |
| | | Creative Arts (3 Hours) |
| | | Social & Behavioral Sciences (3 Hours) |
| | | Writing in the Disciplines (3 Hours) |

UH teachHOUSTON Program (NSM CAPSTONE):

| | | |
|--|-----------|---|
| | CUIN 2300 | Intro to STEM Teaching |
| | CUIN 3350 | Knowing and Learning Science and Mathematics |
| | CUIN 3351 | Classroom Interactions in Science and Mathematics |
| | CUIN 4350 | Multiple Teaching Strategies for Math and Science |
| | EDUC 4314 | Student Teaching: Secondary |
| | EDUC 4315 | Student Teaching: Secondary |

Research Methods requirement is listed within the NSM Natural Sciences Requirement

FREE ELECTIVES:

(Additional hours to complete a total of 120 hours, including at least 36 advanced hours)

| Tr | UH | COURSE |
|----|----|--------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

RULES YOU NEED TO KNOW:

1. MINIMUM of a 2.00 GPA in cumulative, major, and minor GPA to graduate
2. **PRE-REQ RULE:** Must earn C- or better in pre-requisite for MATH courses
3. **C- RULE:** MAXIMUM of 6 hours of grades below C- allowed in UH MATH courses
4. LAST 30 hours must be exclusively completed at UH
5. MAXIMUM of 6 W's allowed during entire undergraduate career
6. MINIMUM of 36 advanced hours and 120 total hours to graduate
7. MAXIMUM of 66 lower level transfer hours may be applied towards UH degree