

Name: \_\_\_\_\_

Date: \_\_\_\_\_

PeopleSoft ID: \_\_\_\_\_

## Check List for BA in Mathematics - teachHOUSTON

| Tr | UH | MATHEMATICS (46 Hours; MUST have 30 advanced hours):            |
|----|----|---|
|    |    | MATH 2413 (1431) Calculus I Fall, Spring, Sum                   |
|    |    | MATH 2414 (1432) Calculus II Fall, Spring, Sum                  |
|    |    | MATH 2415 (2433) Calculus III Fall, Spring, Sum                 |
|    |    | MATH 2131 Linear Algebra Lab Fall, Spring, Sum                  |
|    |    | MATH 2318 (2331) Linear Algebra Fall, Spring, Sum               |
|    |    | MATH 3311 Functions and Modeling Fall                           |
|    |    | MATH 3325 Transition to Advanced Mathematics Fall, Spring, Sum  |
|    |    | MATH 3330 Abstract Algebra Fall, Spring, Sum                    |
|    |    | MATH 3331 Differential Equations Fall, Spring, Sum              |
|    |    | MATH 3333 Intermediate Analysis Fall, Spring, Sum               |
|    |    | MATH 3379 Intro to Higher Geometry Spring                       |
|    |    | MATH 4389 Survey of Undergraduate Mathematics Fall, Spring, Sum |
|    |    | <b>MATH 43 _____ 3 hours 4000-level MATH elective</b>           |

**MATH SENIOR SEQUENCE (6 Hours):**

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

**Possible Senior Sequences:** 4331/4332, 4377/4378, 4335/4336, 4322/4323  
4335/4362, 4350/4351, 4364/4365, 4364/4366, 4320/4380, 4309/4310

**NSM Natural Sciences (7 Hours):**

|  |  |   |
|--|--|---|
|  |  | _____ 1 hr Natural Sciences Lab***            |
|  |  | _____ 3 hours NSM Approved Natural Science*** |
|  |  | _____ 3 hours NSM Approved Natural Science*** |

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

|  |  |   |
|--|--|---|
|  |  | _____ 3 hours 2000-level Foreign Language |
|  |  | _____ 3 hours 2000-level Foreign Language |

ALL 6 hours Foreign Language must be in the SAME Language

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

| Tr | UH | COMMUNICATION (6 Hours):               |
|----|----|--|
|    |    | ENGL 1301 (1303) First Year Writing I  |
|    |    | ENGL 1302 (1304) First Year Writing II |

**STATE REQUIREMENTS (12 Hours):**

|  |  |   |
|--|--|---|
|  |  | _____ American History (3 Hours)                                      |
|  |  | _____ American History (3 Hours)                                      |
|  |  | GOVT 2305 (POLS 1337) U.S. Government: Congress, President, and Court |
|  |  | GOVT 2306 (POLS 1336) U.S. and Texas Constitutions and Politics       |

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

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

**\*EXAMPLES OF 4000-LEVEL MATH ELECTIVES**

(Check Catalog for Pre-Requisites)

|      |                |   |
|------|----------------|---|
| S    | MATH 4309      | Mathematical Biology                              |
| F    | MATH 4310      | Biostatistics                                     |
| S    | MATH 4315      | Graph Theory with Applications                    |
| F    | MATH 4320      | Introduction to Stochastic Processes              |
| F    | MATH 4322      | Introduction to Data Science and Machine Learning |
| S    | MATH 4323      | Data Science and Statistical Learning             |
| F/S  | MATH 4331/4332 | Introduction to Real Analysis                     |
| F/S  | MATH 4335/4336 | Partial Differential Equations                    |
| **   | MATH 4339      | Multivariate Statistics                           |
| F/S  | MATH 4350/4351 | Differential Geometry                             |
| S    | MATH 4355      | Mathematics of Signal Representation              |
| F/S  | MATH 4364/4365 | Numerical Analysis                                |
| **   | MATH 4362      | Theory of Ordinary Differential Equations         |
| F    | MATH 4366      | Numerical Linear Algebra                          |
| F/Su | MATH 4377      | Advanced Linear Algebra I                         |
| S/Su | MATH 4378      | Advanced Linear Algebra II                        |
| S    | MATH 4380      | Mathematical Introduction to Options              |
| S    | MATH 4383      | Number Theory                                     |
| F    | MATH 4388      | History of Mathematics                            |
| **   | MATH 4390      | Applied Mathematics Seminar                       |

F - Fall Semester, S - Spring Semester, Su - Summer Semester

**\*\*Indicates the course is not offered at consistent intervals**

**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 |
|  | BIOL/CHEM/PHYS 4340 | (Research Methods for teachHouston)               |
|  | EDUC 4314           | Student Teaching: Secondary                       |
|  | EDUC 4315           | Student Teaching: Secondary                       |

Under certain conditions, Research Methods may also apply under the NSM Natural Sciences requirement

**FREE ELECTIVES**

(Additional hours to complete a total of 120 hours and 36 advanced hours as needed)

| Tr | UH |  |
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**RULES YOU NEED TO KNOW:**

\*Numbers in parentheses indicate UH course numbers prior to Fall 2021.\*

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

ADVISOR: \_\_\_\_\_