## Middle School Math and Science, B.S.

| Name: |  |  |  |
| :---: | :---: | :---: | :---: |
| General Education Requirements |  |  |  |
| Fundamental Studies |  |  |  |
| Requirements: __credits | Course | Credits | Grade |
| Academic Writing (AW) | ENGL 101 |  |  |
| Professional Writing (PW) |  |  |  |
| Oral Comm. (OC) |  |  |  |
| Math (MA) |  |  |  |
| Analytic Reasoning (AR) |  |  |  |
| Distributive Studies |  |  |  |
| Requirements: __credits | Course | Credits | Grade |
| Natural Science Lab (NL) | PHYS 115 |  |  |
| Natural Sciences (NL) | GEOL 100/110 |  |  |
| History/Social Sciences (HS) | TLPL 360 |  |  |
| History/Social Sciences (HS) | EDHD 413 |  |  |
| Humanities (HU) |  |  |  |
| Humanities (HU) |  |  |  |
| Scholarship in Practice (SP) | TLPL 252 |  |  |
| Scholarship in Practice (SP; non major) |  |  |  |
| Big QuestionsNormally double counted with Distributive Studies |  |  |  |
| Requirements: __credits | Course | Credits | Grade |
| Big Questions | AOSC 200 |  |  |
| Big Questions |  |  |  |
| Diversity <br> (overlap permitted with Distributive Studies and/or Big Questions) |  |  |  |
| Requirements: __credits | Course | Credits | Grade |
| Understanding Plural Soc. (UP) |  |  |  |
| Understanding Plural Soc. (UP) or Cultural Competency (CC) |  |  |  |
| Experiential Learning - opitional <br> (overlap permitted withother requirements/courses) |  |  |  |
| Requirements: __credits | Course | Credits | Grade |
|  |  |  | N/A |
|  |  |  | N/A |


| UID: |  |  |  |
| :--- | :---: | :---: | :---: |
| Major Requirements (Grade of "c-" or higher is required unless otherwise stated) |  |  |  |
| Benchmark 1 Requirements (by 30 credits) |  |  |  |
| AW with C- or higher | 3 |  |  |
| MA with C- or higher | 3 or 4 |  |  |

Benchmark 2 Requirements (by 60 credits)

| TLPL 101 \& TLPL 102 (or TLPL 251) with B- or higher | 3 |  |
| :--- | :---: | :---: |
| Gateway Courses to be completed with 2.7 or higher: |  |  |
| Biological Lab Science (NL) | 4 |  |
| Physical Lab Science (NL) | 4 |  |
| MATH 212 Elements of Numbers and Operations | 3 |  |
| MATH 213 Elements of Geometry and Measurements | 3 |  |


| Major Requirements |  |  |
| :--- | :---: | :---: |
| MATH 212 Elements of Numbers and Operations | 3 |  |
| MATH 213 Elements of Geometry and Measurements | 3 |  |
| MATH 214 Elements of Probability and Statistics | 3 |  |
| MATH 312 Math Reason and Proof for Pre-Serv MS | 3 |  |
| MATH 314 Intro to Prob, Data, Alaly, and STAT for Pre-Serv MS | 3 |  |
| MATH 315 Algebra for Middle School | 3 |  |
| PHYS 115 Inquiry Into Physics | 4 |  |
| GEOL 100/110 Physical Geology/lab | 4 |  |
| BSCI 103, 160/161, 170/171 BIO, ECOL EVoL/Lab, CELL BIO/Lab | 4 |  |
| CHEM 131/132 cHEM Fundamentals I/Lab | 4 |  |
| AOSC 200/201 Weather and Climate | 4 |  |
| Science Elective | 3 or 4 |  |
| TLPL 101 \& TLPL 102 (or TLPL 251) (B- or higher) Intro to Teaching | 3 |  |
| TLPL 252 (Spring only) Students, Schools, and Community | 3 |  |

Pre-Professional Requirements

| TLPL 250 (HU) or 360 (HS)HIST/PHIL Persp on Ed, Foundations of Educ | 3 |  |
| :--- | :--- | :--- |
| EDHD 413 Adolescent Development | 3 |  |
| EDHD 436 Cognition and Motivation in Content Literacy for MS Students | 3 |  |
| TLPL 462 Reading in the Secondary School | 3 |  |


| Requirements for Graduation: |
| :--- |
| $\square$ At least 30 credits must be earned at UMD |
| $\square$ |
| 15 of the final 30 credits must be earned at the $300-400$ level |
| $\square$ |
| $\square$ | students must earn a minimum of 120 credits to complete a degree. $\quad$.


| Professional Courses |  |  |
| :---: | :---: | :---: |
| TLPL 413 Teaching and Learning in Middle school Mathematics | 3 |  |
| TLPL 420 Knowledge, Reasoning, and Learning in Scinece | 3 |  |
| TLPL 423 Interdisciplinary Teaching in Middle Grades I | 2 |  |
| TLPL 475 Equitable Classrooms | 2 |  |
| TLPL 479E Field Experience: Middle school Educaiton | 1 |  |
| TLPL 477 Teaching Acacemically, Culturally and Linguistically Diverse Stds in Middle School \& Secondary Ed | 2 |  |
|  |  |  |
| Yearlong Internship Spring Only |  |  |
| TLPL 489E internship in Education: Middle School | 12 |  |
| TLPL 424 Middle school Teaching ॥ | 2 |  |
| TLPL 476 Equity and Pedagogy | 2 |  |
|  |  | 2.15.23 |

## Middle School Math and Science Four Year Academic Plan

| Year 1 | Fall | Cr. | Spring | Cr . |
| :---: | :---: | :---: | :---: | :---: |
| Benchmark Requirements <br> Fundamental AW with C- or higher Fundamental MA with C- or higher | ENGL 101 (AW) | 3 | MATH 212 | 3 |
|  | Mathematics (MA) | 3 | Science Sequence II (GEOL 100/110) (NL) | 4 |
|  | Science Sequence I (PHYS 115) (NL) | 4 | Humanities (HU)* | 3 |
|  | Humanities (HU)* | 3 | History/Social Science (HS)* | 3 |
|  | TLPL 101 | 1 | TLPL 102 | 2 |
|  | UNIV 100 | 1 |  |  |
|  | Total | 15 | Total | 15 |
| Year 2 | Fall | Cr. | Spring | Cr . |
| Gateway Requirements <br> Gateways must be completed by 60 credits Gateways courses to be completed with 2.7 <br> MATH 212 <br> MATH 213 <br> Biological Lab Science (NL) <br> Physical Lab Science (NL) <br> TLPL 101 \& TLPL 102 with B- or higher | MATH 213 | 3 | TLPL 252 (SP) | 3 |
|  | Science Sequence III (CHEM 131/132) | 4 | MATH 214 | 3 |
|  | TLPL 250 or 360 | 3 | Science Sequence IV (BSCI 103, 160/161, or 170/171) | 4 |
|  | Oral Communication (OC) | 3 | Analytic Reasoning (AR) | 3 |
|  | Scholarship in Practice (SP; non-major) | 3 | EDHD 436 (offered even years only) | 3 |
|  | Total | 16 | Total | 16 |
|  |  |  |  |  |
| Test of Basic Skills |  |  |  |  |
| Year 3 | Fall | Cr . | Spring | Cr . |
| Cumulative GPA of 2.75 | TLPL 413 | 3 | MATH 312 | 3 |
|  | Science Sequence V (AOSC 200/201) (IS) | 4 | Science Sequence VI (Elective) | 3 |
|  | EDHD 413 (HS) | 3 | Elective (Gen Ed as needed*) | 3 |
|  | TLPL 462 | 3 | Professional Writing (PW) | 3 |
|  | Elective | 3 | Elective | 3 |
| Apply to the COE by December 1st. | Total | 16 | Total | 15 |
| Year 4 | Fall | Cr . | Spring | Cr . |
|  | YEARLONG INTERNSHIP |  |  |  |
|  | TLPL 420 | 3 | TLPL 489E | 12 |
|  | TLPL 423 | 2 | TLPL 424 | 2 |
|  | TLPL 475 | 2 | TLPL 476 | 2 |
|  | TLPL 479E | 1 | Total | 16 |
|  | TLPL 477 | 2 |  |  |
|  | MATH 314 | 3 |  |  |
|  | MATH 315 | 3 |  |  |
|  | Total | 16 |  |  |
|  |  |  | Total Degree Credits: | 125 |

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## Middle School Math and Science, B.S.

## Benchmarks

## 45-credit review

Completion of English and Math fundamental studies with a C- or better
Minimum cumulative GPA of 2.75
Submission of College of Education FC/MCEE Self-Assessment

## 60-credit review

Passing scores on a Test of Basic Skills
Minimum cumulative GPA of 2.75
Submission of College of Education FC/MCEE Self-Assessment
Admission to the full degree/professional program (0804P)
TLPL 101 -AND- TLPL 102 (or TLPL 251) with grade of B- or better
Completion of Gateway courses with a grade of C- or better and a 2.70 cumulative GPA in the following courses:

| Gateway Courses | Grade (need a C- or better) | Quality Points |
| :--- | :--- | :--- |
| MATH 212 |  |  |
| MATH 213 |  |  |
| Biological Lab Science |  |  |
| Physical Lab Science |  |  |
| Cumulative Gateway GPA; needs to be 2.70 or higher: |  |  |

## 90-credit review:

Minimum cumulative GPA of 2.75
Passing scores on a Test of Basic Skills
Satisfactory Evaluation on Foundational Competencies
EDHD 413 with a C- or better
EDHD 436 with a C- or better
TLPL 413 with a B- or better
TLPL 462 with a C- or better

## 105-credit review:

Minimum cumulative GPA of 2.75
Passing scores on a Test of Basic Skills
Satisfactory Evaluation on Foundational Competencies and PBA
Passing Scores on the Praxis II
-AND-
TLPL 420 with a C- or better
TLPL 423 with a C- or better
TLPL 475 with a C- or better
TLPL 477 with a C- or better
TLPL 479E with a Satisfactory grade, 'S'


[^0]:    This is a proposed plan and the College of Education does not guarantee that these courses will be offered in the designated semester. Consult the Schedule of Classes for class availability and meeting times.

    * All students must complete two Distribute Studies courses that are approved for Big Questions courses. Students must complete Understanding Plural Society and Cultural Competence courses that may also fulfill a Distributive Studies category.

