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|  | **SOUTH DAKOTA BOARD OF REGENTS**ACADEMIC AFFAIRS FORMS |
| Substantive Program Modification Form |
|  |  |

Use this form to request minor changes in existing programs (majors, minors, certificates, or specializations).

|  |  |
| --- | --- |
| **UNIVERSITY:** | DSU |
| **CURRENT PROGRAM DEGREE:** | **BS** |
| **CURRENT PROGRAM MAJOR/MINOR:** | **Mathematics** |
| **CURRENT SPECIALIZATION** *(If applicable)***:** | **Intermediate Education Specialization andSecondary Education Specialization** |
| **CIP CODE:** | **270101** |
| **UNIVERSITY DEPARTMENT:** | **Mathematics** |
| **BANNER DEPARTMENT CODE:** | **DMATH** |
| **UNIVERSITY COLLEGE:** | **College of Arts and Sciences** |
| **BANNER COLLEGE CODE:** | **DAS 8A** |

**University Approval**

*To the Board of Regents and the Executive Director: I certify that I have read this proposal, that I believe it to be accurate, and that it has been evaluated and approved as provided by university policy.*

|  |  |  |
| --- | --- | --- |
| A picture containing text  Description automatically generated |  | 4/26/2024 |
| Vice President of Academic Affairs or President of the University |  | Date |

|  |
| --- |
|  |

1. **This modification addresses a change in (*place an “X” in the appropriate box*):**

|  |  |
| --- | --- |
|[x]  Total credits required within the discipline |[x]  Total credits of supportive course work |
|  |  |  |  |
|[x]  Total credits of elective course work |[ ]  Total credits required for program |
|  |  |  |  |
|[ ]  Program name |[ ]  Existing specialization |
|  |  |  |  |
|[ ]  CIP Code |[ ]  Other (explain below) |
|[ ]  Modification requiring Board of Regents approval *Must have prior approval from Executive Director or designee* |

1. **Effective date of change: 5/15/2024**
2. **Program Degree Level (*place an “X” in the appropriate box*):**

|  |  |  |  |
| --- | --- | --- | --- |
| Associate |[ ]  Bachelor’s |[x]  Master’s |[ ]  Doctoral |[ ]

1. **Category (*place an “X” in the appropriate box*):**

|  |  |  |  |
| --- | --- | --- | --- |
| Certificate |[ ]  Specialization |[x]  Minor |[ ]  Major |[ ]

1. **If a name change is proposed, the change will occur (*place an “X” in the appropriate box*):**

|  |
| --- |
|[ ]  On the effective date for all students |

|  |
| --- |
|[ ]  On the effective date for students new to the program (enrolled students will graduate from existing program) |
|  |  |

|  |  |
| --- | --- |
| **Proposed new name:**  |  |
|  | *Reminder: Name changes may require updating related articulation agreements, site approvals, etc.* |

1. **Is the program being modified associated with a current articulation agreement?**

|  |  |
| --- | --- |
| Yes |[ ]  No |[x]

* 1. **If yes, will the articulation agreement need to be updated with the partner institution following the approve of the program change? Please explain:**
1. **Primary Aspects of the Modification (*add lines or adjust cell size as needed*):**

|  |  |
| --- | --- |
| *Existing Curriculum* | *Proposed Curriculum (highlight changes)* |
| **Pref.** | **Num.** | **Title** | **Cr.****Hrs.** |  | **Pref.** | **Num.** | **Title** | **Cr. Hrs.** |
| **General Education** | **30** |  | **General Education** | **30** |
| Majors mut take MATH 123 as part of the system-wide general education requirement. Students who choose either of the education specializations must also take EPSY 210 and INED 211. |  | Majors mut take MATH 123 as part of the system-wide general education requirement. Students who choose either of the education specializations must also take EPSY 210 and INED 211. |
|  |  |  |  |  |  |  |  |  |
| Core Mathematics Component  | 12 |  | Core Mathematics Component  | 12 |
|  |  |  |  |  |  |  |  |  |
| Choose one Specialization |  |  | Choose one Specialization |  |
| Information Systems Specialization | 58-60 |  | Information Systems Specialization  | 58-60 |
|  |  |  |  |  |  |  |  |  |
| Cryptography Specialization  | 67 |  | Cryptography Specialization | 67 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Intermediate Education Specialization | ~~61~~ |  | Intermediate Education Specialization | 41 |
|  |  |  |  |  |  |  |  |  |
| Mathematics Component | ~~15~~ |  | Mathematics **and Technology** Component  | 20 |
|  |  |  |  |  | CSC | 105 | Introduction to Computers | 3 |
|  |  |  |  |  | CIS CISCSC | 123130150 | Problem Solving and ProgrammingOrVisual Basic ProgrammingOrComputer Science I | 3 |
| ELED | 422 | K-8 science and math technology | 2 |  | ELED | 422 | K-8 science and math technology | 2 |
| MATH | 341 | Math Concepts for Teachers I | 3 |  | MATH | 341 | Math Concepts for Teachers I | 3 |
| MATH | 342 | Math Concepts for Teachers II | 3 |  | MATH | 342 | Math Concepts for Teachers II | 3 |
| MATH | 361 | Modern Geometry | 3 |  | MATH | 361 | Modern Geometry | 3 |
| ~~MATH~~ | ~~488~~ | ~~Capstone~~ | ~~1~~ |  |  |  |  |  |
| SEED | 301 | Technology for math teachers | 3 |  | SEED | 301 | Technology for Math teachers | 3 |
|  |  |  |  |  |  |  |  |  |
| Professional Education Component | ~~28~~ |  | Professional Education Component | 21 |
| EDFN | 300 | Survey of Middle Level Education | 1 |  | EDFN | 300 | Survey of Middle Level Education | 1 |
| ~~EDFN~~ | ~~338~~ | ~~Foundations of American Education~~ | ~~2~~ |  |  |  |  |  |
| ~~SEED~~ | ~~295~~ | ~~Practicum~~ | ~~1~~ |  |
|  |  |  |  |  | EDFN | 102 | Introduction to Education | 3 |
| EPSY | 302 | Educational Psychology | 3 |  | EPSY | 302 | Educational Psychology | 3 |
| SPED | 100 | Introduction to Persons with Exceptionalities | 3 |  | SPED | 100 | Introduction to Persons with Exceptionalities | 3 |
| ~~EDFN~~ | ~~475~~ | ~~Human Relations~~ | ~~3~~ |  |  |  |  |  |
| SEED | 302 | Secondary/Middle Content Area | 2 |  | SEED | 302 | Secondary/Middle Content Area | 2 |
| ~~SEED~~ | ~~440~~ | ~~Classroom management~~ | ~~2~~ |  |  |  |  |  |
| SEED | 450 | Reading and Content Literacy | 3 |  | SEED | 450 | Reading and Content Literacy | 3 |
| SEED | 488 | 7-12 Student Teaching | ~~8~~ |  | SEED | 488 | 7-12 Student Teaching | 6 |
|  |  |  |  |  |  |  |  |  |
| ~~K-12 Educational Technology minor~~ | ~~18~~ |  | No required minor  |  |
|  |  |  |  |  |  |  |  |  |
| Electives | ~~17~~ |  | Electives | 37 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| ~~Secondary Education Specialization~~ | ~~68-69~~ |  | Secondary Education Specialization | 42 |
| Mathematics Component | ~~23~~ |  | Mathematics **and Technology** Component | 28 |
|  |  |  |  |  | CSC | 105 | Introduction to computers | 3 |
|  |  |  |  |  | CIS CISCSC | 123130150 | Problem Solving and ProgrammingOrVisual Basic ProgrammingOrComputer Science I | 3 |
| MATH | 125 | Calculus II | 4 |  | MATH | 125 | Calculus II | 4 |
| ~~MATH~~ | ~~341~~ | ~~Math Concepts for Teachers I~~ | ~~3~~ |  |  |  |  |  |
| ~~MATH~~ | ~~342~~ | ~~Math Concepts for Teachers II~~ | ~~3~~ |  |  |  |  |  |
| MATH | 361 | Modern Geometry | 3 |  | MATH | 361 | Modern Geometry | 3 |
| MATH | 413 | Abstract Algebra I | 3 |  | MATH | 413 | Abstract Algebra I | 3 |
| ~~MATH~~ | ~~488~~ | ~~Capstone~~ | ~~1~~ |  |  |  |  |  |
|  |  |  |  |  | SEED | 301 | Technology for Math teachers | 3 |
| Choose six credits from the following | 6 |  | Choose nine credits from the following | 9 |
| MATH | 225 | Calculus III | 4 |  | MATH | 225 | Calculus III | 4 |
| MATH | 282 | Mathematics for Games | 3 |  | MATH | 282 | Mathematics for Games | 3 |
| MATH | 318 | Adv. Discrete Mathematics | 3 |  | MATH | 318 | Adv. Discrete Mathematics | 3 |
| MATH | 321 | Differential Equations | 4 |  | MATH | 321 | Differential Equations | 4 |
| MATH | 381 | Intro to Probability & Stats | 3 |  | MATH | 381 | Intro to Probability & Stats | 3 |
| MATH | 418 | Mathematical Modeling | 3 |  | MATH | 418 | Mathematical Modeling | 3 |
| MATH | 436 | Number Theory & Cryptography | 3 |  | MATH | 436 | Number Theory & Cryptography | 3 |
| MATH | 437 | Cryptography and Codes | 3 |  | MATH | 437 | Cryptography and Codes | 3 |
| MATH | 471 | Numerical Analysis | 3 |  | MATH | 471 | Numerical Analysis | 3 |
| MATH | 475 | Operations Research | 3 |  | MATH | 475 | Operations Research | 3 |
| MATH | 492 | Special Topics | 3 |  | MATH | 492 | Special Topics | 3 |
| MATH | 498 | Undergrad Research/Scholarship | 3 |  | MATH | 498 | Undergrad Research/Scholarship | 3 |
|  |  |  |  |  |  |  |  |  |
| Professional Education Component | ~~27~~ |  | Professional Education Component | 20 |
| ~~EDFN~~ | ~~338~~ | ~~Foundations of American Education~~ | ~~2~~ |  |  |  |  |  |
|  |  |  |  |  | EDFN | 102 | Introduction to Education | 3 |
| ~~SEED~~ | ~~295~~ | ~~Practicum~~ | ~~1~~ |  |  |  |  |  |
| EPSY | 302 | Educational Psychology | 3 |  | EPSY | 302 | Educational Psychology | 3 |
| SPED | 100 | Introduction to Persons with Exceptionalities | 3 |  | SPED | 100 | Introduction to Persons with Exceptionalities | 3 |
| ~~EDFN~~ | ~~475~~ | ~~Human Relations~~ | ~~3~~ |  |  |  |  |  |
| SEED | 302 | Secondary/Middle Content Area | 2 |  | SEED | 302 | Secondary/Middle Content Area | 2 |
| ~~SEED~~ | ~~440~~ | ~~Classroom management~~ | ~~2~~ |  |  |  |  |  |
| SEED | 450 | Reading and Content Literacy | 3 |  | SEED | 450 | Reading and Content Literacy | 3 |
| SEED | 488 | 7-12 Student Teaching | 8 |  | SEED | 488 | 7-12 Student Teaching | 6 |
|  |  |  |  |  |  |  |  |  |
| ~~K-12 Ed Tech Minor~~  | ~~18-19~~ |  | No required minor  |  |
|  |  |  |  |  |  |  |  |  |
| Electives | ~~9-10~~ |  | Electives | 30 |
| Total number of hours required for major, minor, or specialization |  |  | Total number of hours required for major, minor, or specialization |  |
| Total number of hours required for degree | 120 |  | Total number of hours required for degree | 120 |

1. **Explanation of the Change:**

The College of Education has replaced EDFN 338 with EDFN 102 increasing the credit hours from two to three and embedding the Practicum in the course thus replacing SEED 295 as well.

The College of Education has lowered the number of student teaching credit hours required from 8 to 6.

The MATH 341 and MATH 342 content is covered in much more depth and at a more advanced level in the MATH 361 and MATH 413 courses. Students have not had issues passing the Praxis content exam thus eliminating the need for a preparation class which is what the Capstone course was used for in the program.

The Human Relations course is no longer a required course to be certified in the state of South Dakota and was not required in the recent accreditation of the program. Similarly, the classroom management course is not required for certification. Also, it is not required that students earn the k-12 ed tech minor so instead of forcing students to take classes that are not required for certification, the number of elective credits has been increased to allow students to choose how those electives are used which may include minors or certificates. This also enables students that change majors to complete the math program with a secondary specialization with fewer required support courses.