## MATHEMATICS, GRADES 9-12

| EDUCATOR PREPARATION PROGRAM NAME | EDUCATOR PREPARATION PROGRAM CODE |
| :--- | :--- |
| Missouri Baptist University | 041538 |

## INSTRUCTIONS

Please complete Educator Preparation Program (EPP) Name \& EPP Code above.

## Certification Requirements

- Course Number - List the course number(s) for the course(s) or groups of competencies that align with the specific section of the requirements. It is possible to have more than one course or grouplisted.
- Course Title - List the course title(s) for the course(s) or groups of competencies that align with the specific section of the requirements. It is possible to have more than one course or grouplisted.
- Semester Hours - List the number of semester hours for each specific section. It is possible to use decimals (to the nearest tenth) to indicate partial use of a course to meet a requirement. The total number of semester hours must meet or exceed the minimum required number of semester hours.

Email the completed cover sheet, curriculum matrix, and advising/program information to DESE.MoSPETransition@dese.mo.gov on or before the date established in the Transition Plan.

QUESTIONS: Contact Educator Preparation, 573-751-1668 or DESE.MoSPETransition@dese.mo.gov
A. Professional Requirements (Minimum of 26 semester hours)

1. Content Planning and Delivery

|  | Course Number | Course Title | Semester Hours |
| :---: | :---: | :---: | :---: |
| a. Curriculum and Instructional Planning | ECTA 323 | Curriculum, Assessment, and Data-based Decision Making | 1 |
| b. Instructional Strategies and Techniques in Content Area Specialty | $\begin{aligned} & \text { EDMS 473/573 } \\ & \text { AND } \\ & \text { EDSP } 453 / 553 \end{aligned}$ | Teaching Mathematics for Middle/Secondary: <br> Seminar and Field Experience <br> AND <br> Teaching Remedial Math K-12: Seminar and Field Experience | 3 3 |
| c. Assessment, Student Data, and Data-Based Decision-Making | ECTA 323 | Curriculum, Assessment, and Data-based Decision Making | 1 |
| d. Strategies for Content Literacy | EDRD 423/523 | Integration of Literacy in the Content Areas | *Hours included below in 4a |
| e. Critical Thinking and Problem Solving | EDUC 201 <br> EDUC 200 <br> EDUC 303 <br> EDUC 373 OR <br> EDUC 573 | Professional Growth \& Folio Development I Continuing Portfolio Development for Teacher Candidates <br> Methods of Teaching and Differentiated Instruction <br> Technology and Instructional Media OR Applications of Technology in Teaching and Learning | 1 0 <br> 1 <br> 3 |
| f. English Language Learning | EDUC 203 EDRD $423 / 523$ | Teaching in a Diverse Society <br> Integration of Literacy in the Content Areas Students transferring in a course for EDRD 423/523 which does not include a field experience working with English language learners must complete EDCL 420/520 Field Experience with English Language Learners | 1 *Hours included below in 4a |
| 2. Individual Student Needs |  |  |  |
|  | Course Number | Course Title | Semester Hours |
| a. Psychological Development of the Child and Adolescent | PSYC 313 OR PSYC 553 EDPS 383 EDPS $453 / 553$ EDTR $413 / 513$ | Human Growth and Development OR <br> Advanced Human Development <br> Psychology of Teaching and Learning <br> The Exceptional Child <br> Trauma Informed Classroom | $3$ $\begin{aligned} & 1 \\ & 1 \\ & 1 \end{aligned}$ |
| b. Psychology/Education of the Exceptional Child | EDPS 453/553 | The Exceptional Child | 2 |
| c. Differentiated Learning | EDUC 303 | Methods of Teaching and Differentiated Instruction | 2 |
| d. Classroom Management | $\begin{aligned} & \text { ETOP 423/523 } \\ & \text { EDTR } 413 / 513 \end{aligned}$ | Classroom and Behavior Management Trauma Informed Classroom | $\begin{aligned} & 2 \\ & 1 \end{aligned}$ |
| e. Cultural Diversity | EDUC 203 | Teaching in a Diverse Society | 2 |
| f. Educational Psychology | EDPS 383 | Psychology of Teaching and Learning | 1 |
| 3. Schools and the Teaching Profession |  |  |  |


|  | Course Number | Course Title | Semester Hours |
| :---: | :---: | :---: | :---: |
| a. Consultation and Collaboration | ECTA 323 | Curriculum, Assessment, and Data-based Decision Making | 1 |
|  | EDPS 383 | Psychology of Teaching and Learning | 0.5 |
|  | EDTR 413/513 | Trauma Informed Classroom | 1 |
|  | $\begin{gathered} \text { EDUC } 210 \text { AND } \\ 410 / 510 \end{gathered}$ | Teaching Field Experience I and II Seminar | 0 |
|  | EDUC 401 | Professional Growth and Folio Development II | 1 |
|  | ETOP 423/523 | Classroom and Behavior Management | 0.5 |
| b. Legal/Ethical Aspects of Teaching | EDPS 383 EDUC 410/510 ETOP 423/523 | Psychology of Teaching and Learning Teaching Field Experience II Seminar Classroom and Behavior Management | $\begin{gathered} 0.5 \\ 0 \\ 0.5 \end{gathered}$ |
| 4. Secondary Literacy (Minimum of 6 semester hours) |  |  |  |
|  | Course Number | Course Title | Semester Hours |
| a. Reading and Writing in the Content Area | EDRD 423/523 | Integration of Literacy in the Content Areas | 3 |
| b. Instructional Interventions for Students with | EDRD 463/563 | Reading and Writing Strategies for Middle/Secondary Content Areas | 3 |
| Professional Requirements - Total Semester Hours |  |  | 41 |
| B. Field and Clinical Experiences (Minimum of 10 semester hours) |  |  |  |
|  | Course Number | Course Title | Semester Hours |
| 1. Early Field Experiences (Minimum of 1 semester hour with a minimum of 30 clock hours) | EDCL 211 ${ }^{*} E D C L 220$ <br> EDUC 210 | Teaching Field Experience I <br> *Teaching Field Experience (required for transfer students who do not have a MEES (or equivalent) evaluation for Field I Teaching Field Experience I Seminar | $\begin{aligned} & 1 \\ & 0 \\ & 0 \\ & \hline \end{aligned}$ |
| 2. Mid-Level Field Experiences (Minimum of 1 semester hour with a minimum of 45 clock hours) | EDCL 411/511 EDUC 410/510 | Teaching Field Experience II Teaching Field Experience II Seminar | $\begin{aligned} & 1 \\ & 0 \\ & \hline \end{aligned}$ |
| 3. Culminating Clinical Experiences (Minimum of 8 semester hours with a minimum of 12 weeks in 1 placement) | $\begin{gathered} \hline \text { ESCL 4712/5712 } \\ \text { EDUC } 470 \end{gathered}$ | Student Teaching: Secondary <br> Student Teaching Professional Development Seminar | $\begin{gathered} 12 \\ 0 \end{gathered}$ |
| Field and Clinical Experiences - Total Semester Hours |  |  | 14 |
| C. Mathematics Content Knowledge Area (Minimum of 36 semester hours) |  |  |  |
|  | Course Number | Course Title | Semester Hours |
| 1. Calculus and Analytical Geometry ( 9 semester hours) | MATH 164 MATH 254 MATH 264 | Calculus I Calculus II Calculus III | $\begin{aligned} & 4 \\ & 4 \\ & 4 \end{aligned}$ |
| 2. Algebraic Structures (3 semester hours) | MATH 423 | Algebraic Structures | 3 |
| 3. Geometry (3 semester hours) | MATH 323 | Foundations of Geometry | 3 |
| 4. Computer Science (3 semester hours) | ITBU 203 | Introduction to Application Development | 3 |
| 5. Electives from the above coursework ( 6 semester hours) | MATH 264 <br> MATH 363 | Calculus III Differential Equations | $\begin{aligned} & \hline 3 \\ & 3 \\ & \hline \end{aligned}$ |
| 6. Additional Mathematics coursework - Minimum of 12 semester hours to include at least 3 of the following areas of Mathematics |  |  |  |
| a. History of Mathematics (3 semester hours) | MATH 433 | Mathematics Seminar | 3 |
| b. $\begin{aligned} & \text { Structure of the Real Number System (3 } \\ & \text { semester hours) }\end{aligned}$ |  |  |  |
| c. Number Theory (3 semester hours) | MATH 213 <br> MATH 313 | Discrete Mathematics Elementary Number Theory | $\begin{aligned} & \hline 3 \\ & 3 \\ & \hline \end{aligned}$ |
| d. $\begin{aligned} & \text { Completion of Calculus Sequence (3 } \\ & \text { semester hours) }\end{aligned}$ | MATH 453A MATH 453B | Advanced Calculus I Advanced Calculus II | $\begin{aligned} & \hline 3 \\ & 3 \\ & \hline \end{aligned}$ |
| e. Probability and Statistics (3 semester hours) | MATH 273 | Probability and Statistical Methods | 3 |
| f. Computer Science (3 semester hours) |  |  |  |
| g. Linear Algebra (3 semester hours) | MATH 353 | Linear Algebra | 3 |
| Content Knowledge Area - Total Semester Hours |  |  | 36 |

