Murray State University
DEPT. OF MATHEMATICS AND STATISTICS
MATHEMATICS AREA/SECONDARY CERTIFICATION (GRADES 8-12)
Bachelor of Science Degree

2009-2011 Undergraduate Bulletin

Student___________________________M#_______________Advisor___________________________

UNIVERSITY STUDIES FOR B.S. Degree (46-47 Hours)  

<table>
<thead>
<tr>
<th>Hours Completed</th>
<th>Grade</th>
<th>Semester</th>
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Oral and Written Communication (7 hours)
- ENG 105  Critical Reading, Writing, and Inquiry  4 ________ _______
- COM 161  Introduction to Public Speaking  3 ________ _______

Scientific Methodologies, and Quantitative Skills (14-15 hours)
- MAT 250  Calculus I  5 ________ _______
- MAT 308  Calculus II  5 ________ _______
- Approved University Studies Science with a Lab  4-5 ________ _______

World’s Historical, Literary, and Philosophical Traditions (6 hours)
- CIV 201 or 201  World Civilization I or II  3 ________ _______
- HUM 211  The Western Humanities Tradition  3 ________ _______

Global Awareness, Cultural Diversity, and the World’s Artistic Traditions (3 hours)
- Approved University Studies Elective  3 ________ _______

Social and Self-Awareness and Responsible Citizenship (6 hours)
- Ethics, Social Responsibility, and Civil Eng. Approved course  3 ________ _______
- PSY 180  General Psychology  3 ________ _______

University Studies Approved Electives (10 hours)
- EDP 260  Psychology of Human Development  3 ________ _______
- EDU 103  Issues and Practices of American Education  3 ________ _______
- MAT 309  Calculus and Analytic Geometry III  4 ________ _______

PROFESSIONAL EDUCATION COURSES (35 hours—29 in addition to the 6 counted above)

- COM 372  Communication in Educational Environments  3 ________ _______
- EDP 260  Psychology of Human Development*  3 ________ _______
- EDU 103  Issues and Practices of American Education*  3 ________ _______
- EDU 303  Strategies of Teaching  3 ________ _______
- EDU 403  Structures and Foundations of Education  2 ________ _______
- EDU 405  Evaluation and Measurement in Education  2 ________ _______
- SEC 420  Practicum in Secondary Schools  2 ________ _______
- SEC 421  Student Teaching in the Secondary School  14 ________ _______
- SED 300  Educating Students with Disabilities  3 ________ _______
### CORE CONTENT COURSES (47 hours—33 in addition to the 14 already counted above.)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>MAT 250</td>
<td>Calculus I*</td>
<td>5</td>
</tr>
<tr>
<td>MAT 308</td>
<td>Calculus II*</td>
<td>5</td>
</tr>
<tr>
<td>MAT 309</td>
<td>Calculus and Analytic Geometry III*</td>
<td>4</td>
</tr>
<tr>
<td>MAT 099</td>
<td>Freshman Orientation</td>
<td>1</td>
</tr>
<tr>
<td>MAT 312</td>
<td>Mathematical Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>MAT 335</td>
<td>Matrix Theory &amp; Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MAT 510</td>
<td>Foundations of Geometry</td>
<td>3</td>
</tr>
<tr>
<td>MAT 540</td>
<td>Mathematical Statistics I</td>
<td>4</td>
</tr>
<tr>
<td>MAT 550</td>
<td>Teaching Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MAT 551</td>
<td>Mathematics for Teachers</td>
<td>3</td>
</tr>
</tbody>
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At least one course from each of the following two groups:

1. MAT 421 Introduction to Algebraic Structures, MAT 505 Abstract Algebra I,
   - MAT 516 Topology I, and/or MAT 525 Advanced Calculus I. 3

2. MAT 442 Numerical Analysis, MAT 501 Mathematical Modeling,
   - MAT 524 Boundary Value Problems, and/or
   - MAT 541 Mathematical Statistics II. 3
   - One 3 hour mathematics course numbered 400 and above. 3
   - Approved course in Computer Programming 4

**Writing Intensive Course**

**Technology Intensive Course.**

### SUPPORT COURSES (12 hours)

At least nine hours (3 courses) selected from courses in Mathematics numbered 400 or above or from courses in disciplines related to the application of mathematics selected from a list approved by the Department of Mathematics and Statistics.

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<tr>
<td>HEA 191</td>
<td>Personal Health</td>
<td>3</td>
</tr>
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Total Curricular Requirements: 120-121 hours

*: These courses have already been listed above under University Studies, but are listed here because admission to Teacher Education requires that the student achieve a GPA of at least 2.45 Core-Content and in Profession Education courses. (See **GRADE POINT AVERAGE REQUIREMENTS** below).

**PRAXIS EXAMS:** To be certified, prospective secondary teachers are required to make a passing score on the following national exams – PRAXIS 0061, PRAXIS 0063, PLT 0524.

Teacher certification requirements are subject to change. Before registering for the test(s), please refer to the Education Professional Standards Board (EPSB) website at HYPERLINK "http://www.kyepsb.net" www.kyepsb.net for current requirements or contact Ms. Rice at 502-564-4606 or 888-598-7667.

**GRADE POINT AVERAGE REQUIREMENTS:** Grade point averages are reviewed during three checkpoints: admission to teacher certification (see Requirements for Admission to Teacher Certification), admission to student teaching (requires a 2.45 average overall, a 2.45 average in the Core Content coursework in the Mathematics major; and a 2.45 average in Professional Education courses), and at the time of completion/graduation (2.45 overall).
IMPORTANT: Upon completion of 60 undergraduate credit hours (junior status), students enrolled or desiring enrollment in education coursework beyond 12 credit hours MUST be admitted to the Teacher Education Program. Students must be admitted to Teacher Education prior to enrollment in upper level teacher education courses.

REQUIREMENTS FOR ADMISSION TO TEACHER EDUCATION AND STUDENT TEACHING AT MURRAY STATE UNIVERSITY:

In order to be admitted to teacher education, students must:

1) Provide Teacher Education Services with scores of test(s) to measure general academic proficiency. A person shall not be permitted to apply for admission to the Teacher Education program without first providing evidence of meeting the general academic proficiency (GAP) requirement through any one of the following tests: ¹

A minimum composite score of 21 on the (ACT); or scores established by the KEPSB for the Pre-Professional Skills Test (PPST) Math, Reading, and Writing; CBT of PPST (computer based test) Math, Reading, Writing; or minimum established scores in each area (analytical, quantitative, and verbal) on the Graduate Records Exam (GRE) and writing assessment as required by the institution; or the minimum established score on the SAT and required writing assessment.

2) Have earned an overall undergraduate GPA of 2.45 on a 4.0 scale at the point of admission, as well as a 2.45 average in the Core Content Coursework in the Mathematics major, and a 2.45 average in the Professional Education coursework. This 2.45 minimum GPA remains a requirement throughout the teacher certification program. (See Grade Point Average Requirements above).

3) Have completed a minimum of 24 credit hours with a minimum 2.45 GPA to include the following coursework:
   (a) ENG 105 or 104 with a “B” or better
   (b) MAT 117 (or higher level university studies math) with a “C” or better
   (c) COM 161 or HON 165 with a “C” or better
   (d) EDU 103 with a “C” or better

4) An interview with major academic advisor or chair (or advisor may opt to write a letter of recommendation in lieu of an interview)

5) A review of the Professional Code of Ethics for Kentucky School Personnel and a Declaration of Eligibility (pink sheet) signed by the candidate affirming a commitment to upholding the code and acknowledging awareness of information required for state certification

6) Have supplied TES with any other required information

7) Approval of your college Admissions Committee

When all the above requirements have been met, the formal application (green sheet) can be submitted, accompanied by all required documentation. This includes GAP scores and a transcript showing all college work to date. Admission will only be granted following a successful review by the Admission to Teacher Education Committee of your college.

Exit Assessment: The student’s progress is continuously assessed throughout the program using established program checkpoints and portfolio entries addressing Kentucky Teachers performance standards.

¹ An official score report for the general academic proficiency exam must be available at the point of formal application.

See Teacher Education Services office for details on admission to Student Teaching.

Statement: The required demonstration of computer competency for Certification is met by the computer requirement within the Mathematics major requirements.

Note: All students are required to complete a formative portfolio based on activities and assignments linked to
classroom and field experiences. Continuous assessment procedures are used to document and systematically monitor student progress through each program in order to determine the degree to which students have internalized and can demonstrate proficiency with the Kentucky Teacher Standards. Check Points are designed to facilitate student progress through the education program, provide students with information for completion of the portfolio at designated stages and serve as a means for making recommendations for improvement or remediation when needed, to be reviewed at the next check point. The eligibility portfolio is formally assessed during the student teaching semester. For additional information and requirements each student should see his/her advisor.

Advisor’s Signature _______________________________________ Date ____________

Student’s Signature _______________________________________ Date ____________