WINONA STATE UNIVERSITY
REQUIRED CHECKLIST FOR ALL CURRICULAR PROPOSALS

This checklist enables A2C2 representatives to endorse that their departments have accurately followed the Process for Accomplishing Curricular Change. For each course or program proposal submitted to A2C2, this checklist must be completed, signed by the submitting department's A2C2 representative, and included with the proposal when forwarded for approval. Peer review of proposals is also strongly advised, e.g., departments should discuss and vote on the proposals as submitted to A2C2, rather than on just the ideas proposed or drafts of proposals.

If a proposal fails to follow or complete any aspect of the process, the Course and Program Proposal Subcommittee will postpone consideration of the proposal and return it to the department's A2C2 representative for completion and resubmission. Resubmitted proposals have the same status as newly submitted proposals.

Note: This form need not be completed for notifications.

1. The appropriate forms and the “Approval Form” have been completed in full for this proposal. All necessary or relevant descriptions, rationales, and notifications have been provided.

   Completed

2a. The “Financial and Staffing Data Sheet” has been completed and is enclosed in this proposal, if applicable.

   Completed   NA

2b. For departments that have claimed that “existing staff” would be teaching the course proposed, an explanation has been enclosed in this proposal as to how existing staff will do this, e.g., what enrollment limits can be accommodated by existing staff. If no such explanation is enclosed, the department's representative is prepared to address A2C2's questions on this matter.

   Completed   NA

3. Arrangements have been made so that a department representative knowledgeable of this proposal will be attending both the Course and Program Proposal Subcommittee meeting and the full A2C2 meeting at which this proposal is considered.

   Completed

   Name and office phone number of proposal's representative: Nicole Williams x5580  @  Brand Deppa  x5457

4. Reasonable attempts have been made to notify and reach agreements with all university units affected by this proposal. Units still opposing a proposal must submit their objections in writing before or during the Course and Program Proposal Subcommittee meeting at which this proposal is considered.

   Completed   NA

5. The course name and number is listed for each prerequisite involved in this proposal.

   Completed   NA

6. In this proposal for a new or revised program (major, minor, concentration, etc.), the list of prerequisites provided includes all the prerequisites of any proposed prerequisites. All such prerequisites of prerequisites are included in the total credit hour calculations.

   Completed   NA

7. In this proposal for a new or revised program, the following information for each required or elective course is provided:
   a. The course name and number.
   b. A brief course description.
   c. A brief statement explaining why the program should include the course.

   Completed   NA

8. This course or program revision proposal:
   a. Clearly identifies each proposed change.
   b. Displays the current requirements next to the proposed new requirements, for clear, easy comparison.

   Completed   NA

9. This course proposal provides publication dates for all works listed as course textbooks or references using a standard form of citation. Accessibility of the cited publications for use in this proposed course has been confirmed.

   Completed   NA

Department's A2C2 Representative or Alternate

Date

[Revised 9-05]
WINONA STATE UNIVERSITY
PROPOSAL FOR REVISED PROGRAMS AND NEW PROGRAMS

Use this form to submit proposals for revised majors, minors, concentrations, options, etc.

Note: A department, with its dean’s approval, may change up to two courses per year within an existing major, minor, concentration, option, etc., per year without seeking review of A2C2 and/or graduate Council, provided that (1) the total credits do not increase or decrease for the major, minor, concentration, option, etc., and (2) the change does not affect other departments or the University Studies Program. A2C2 and/or Graduate Council do, however, wish to be informed of these changes. Use form Notifications.

If a department wishes to make more extensive revisions to an existing major, minor, concentration, option, etc., complete and submit this form with the appropriate number of copies. Refer to Regulation 3-4, Policy for Changing the Curriculum, for complete information on submitting proposals for curricular changes.

Department: Mathematics and Statistics

Title of Program: Middle School Mathematics Minor

Revised: ______ Major ______ Minor ______ Concentration ______ Option ______ Other

List all Major/Minor Codes that Apply:

New: ______ Major ______ Minor ______ Concentration ______ Option ______ Other

List all Major/Minor Codes that Apply:

Total credit hours: 18 ______ Classroom Hours ______ Lab Hours ______

Proposed Implementation Date: ______ Fall 2010

Please attach to this proposal a narrative with the following information:

A. Statement of major focus and objectives of the revised program.

The major focus of this new minor will be to prepare effective middle school mathematics teachers. Students who complete this minor will be able to:

• Incorporate flexible strategies in the teaching of mathematics, which includes developing rich lessons for a wide-array of middle school mathematics content including: fractions, geometry, algebra, data analysis and probability, and measurement.
• Understand the concepts, processes and algorithms, and the purposes beneath them, found in the middle school mathematics curriculum.
• Approach mathematical problems from multiple perspectives.
• Use appropriate manipulative materials, technology, and pictorial representations necessary in the development of quantitative literacy.
• Construct strategies, which are supported by current research, for teaching mathematical concepts to students of differing abilities.
• Implement the five (NCTM) Process Standards: problem solving, reasoning and proof, communication, connections, and representation.

B. New Catalog Content

1. Provide a list of program content as it would appear in the catalog including required courses, electives, etc., by number and name. Include the number and name for each prerequisite, and all prerequisites of proposed prerequisites. All such prerequisites, and prerequisites of prerequisites, should be included in the total credit hour calculations for the revised program.
Middle School Mathematics – Minor

UNIVERSITY STUDIES REQUIREMENTS INCLUDE:
I. BASIC SKILLS
   MATH 115 College Algebra (4) or higher math course

II. UNITY AND DIVERSITY
   MTED 201 Technology-Based Geometry and Probability for Elementary Teachers (4)

LICENSE REQUIREMENTS (K-6 Major)
   MTED 125 Mathematics for Elementary Teachers (4) Prerequisite Basic Skills Mathematics Requirement
   Middle School Math Minor Requirements (18 credits)
   
   MATH 130 Matrix Algebra (3) Prerequisite: MATH 115
   MATH 140 Applied Calculus (3) Prerequisite: MATH 115
   MTED 222 Teaching Mathematics in the Middle School (3) Prerequisite: MTED 201
   STAT 110 Fundamentals of Statistics (3) Prerequisite: qualifying score on placement exam
   MTED 225 Numerical Reasoning for Middle School Teachers (3) Prerequisite: MTED 125
   EFRT 449 Middle Level Philosophy, Organization and Interdisciplinary Planning (3) Prerequisite: EFRT 304 and 311 or 305 and
   
   2. New catalog narrative, if any.

   This minor is designed for students completing a teaching major. The minor prepares students to teach middle school
   mathematics. Students interested in a middle school mathematics teaching minor should contact the Department of Mathematics
   and Statistics for an advisor.

C. Description of Revisions, to include
   1. A display of current program requirements next to proposed new requirements for clear, easy comparison.
   2. A clear identification of each proposed change.
   3. The following information for each required or elective course:
      a. Course number and name,
      b. A brief course description, and
      c. A brief statement explaining why the program should include the course.

   Attach a Financial and Staffing Data Sheet.

   Attach an Approval Form.

   Also fill out the MNSCU New Program Application or the Program Redesign Application, whichever applies and submit directly to
   the VPAA.

   Department Contact Person for this Proposal:

   Nicole Williams  457-5380  nwilliams@winona.edu
   Name (please print)  Phone  e-mail address

   [Revised 7-05-07]
Include a Financial and Staffing Data Sheet with any proposal for a new course, new program, or revised program.

Please answer the following questions completely. Provide supporting data.

1. Would this course or program be taught with existing staff or with new or additional staff? If this course would be taught by adjunct faculty, include a rationale.

   MTED 222 – Teaching Mathematics in Middle School (3) is an expanded version of MTED 221 – Teaching Mathematics in Middle School (1); thus there is a 2 S.H. credit increase. As was the case with the 1 S.H. version of the course, it will be taught by existing mathematics education faculty. The new course MTED 225 – Numerical Reasoning for Middle School Teachers will also be taught by existing mathematics education faculty. Both courses will be offered annually and as a result, will theoretically increase the number of MTED credits offered by 5 S.H.

   The other courses required for this minor are already offered regularly by existing staff. Depending on the number of students choosing this minor, additional sections of certain required courses could be needed in the future but most likely not at first.

2. What impact would approval of this course/program have on current course offerings? Please discuss number of sections of current offerings, dropping of courses, etc.

   As mentioned above, with the exception of the credit increase associated with MTED 222 and the new course MTED 225, we anticipate that students in this minor will be accommodated in existing sections of the required courses.

3. What effect would approval of this course/program have on the department supplies? Include data to support expenditures for staffing, equipment, supplies, instructional resources, etc.

   MTED 222 and MTED 225 together represent an additional 5 S.H. of coursework added to our existing offerings. So theoretically this will require an additional .20 faculty FTE. The “cost” of additional faculty will be certainly offset by the tuition generated by these courses. Also, it is likely the .20 FTE could be partially or completely absorbed through scheduling efficiencies in lower division mathematics courses.

   The addition of this minor should not increase our departmental supply needs appreciably as students who would likely opt to complete this minor are already currently taking several of these courses anyway and D2L is utilized extensively for the dissemination of course materials.
**WINONA STATE UNIVERSITY**  
NEW AND REVISED COURSE AND PROGRAM APPROVAL FORM

Routing form for new and revised courses and programs.  

<table>
<thead>
<tr>
<th>Department Recommendation</th>
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<tbody>
<tr>
<td>Department Chair</td>
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<td>Date</td>
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| A2C2 Recommendation | Approved | Disapproved |  
|---------------------|----------|-------------|---------|  
| Chair of A2C2 |  
| Date |  

| Graduate Council Recommendation | Approved | Disapproved |  
|----------------------------------|----------|-------------|---------|  
| Chair of Graduate Council |  
| Date |  
| Director of Graduate Studies |  
| Date |  

| Faculty Senate Recommendation | Approved | Disapproved |  
|---------------------------------|----------|-------------|---------|  
| President of Faculty Senate |  
| Date |  

| Academic Vice President Recommendation | Approved | Disapproved |  
|-----------------------------------------|----------|-------------|---------|  
| Academic Vice President |  
| Date |  

| Decision of President | Approved | Disapproved |  
|------------------------|----------|-------------|---------|  
| President |  
| Date |  

Please forward to Registrar.  

Registrar  
Date entered  
Please notify department chair via e-mail that curricular change has been recorded.  

[Revised 7-5-07]