Washington State University

MAJOR CURRICULAR CHANGE FORM -- NEW/RESTORE COURSE

☐ Please attach rationale for your request, a complete syllabus, and explain how this impacts other units in Pullman and other campuses (if applicable).

☐ Obtain all required signatures with dates.

☐ Provide original stapled packet of signed form/rationale statement/syllabus PLUS 10 stapled copies of complete packet to the Registrar's Office, campus mail code 1035.

☐ Submit one electronic copy of complete packet to wsu.curriculum@wsu.edu.

Requested Future Effective Date: Fall 2016 (term/year) Course Typically Offered: every semester

DEADLINES: For fall term effective date: October 1st; for spring or summer term effective date: February 1st. See instructions.

NOTE: Items received after deadlines may be put to the back of the line or forwarded to the following year. Please submit on time.

☐ New Course ☐ Temporary Course ☐ Restore Course

Math

course subject/crosslist: 594

course no.

title

Mathematics Education Seminar

Graduate standing or permission of the instructor

Credit hrs lecture hrs lab or studio hrs per week

prerequisite

Description for catalog: Current research in mathematics education.

Additional Attributes: Check all that apply.

☐ Crosslisting (between WSU departments)*

☐ Variable credit:____________________

☐ Conjoint listing (400/500):____________________

☐ Repeat credit (cum. max. hrs): 10

Special Grading: ☐ S, F; ☐ A, S, F (PEACT only); ☐ S, M, F (VET MED only); ☐ H, S, F (PHARMACY, PHARDSCI only)

☐ Cooperative with UI

☐ Other (please list request):____________________

The following items require prior submission to other committees/depts. (SEE INSTRUCTIONS.)

☐ Request to meet Writing in the Major [M] requirement (Must have All-University Writing Committee Approval.)

☐ Request to meet UCORE in____________________ (Must have UCORE Committee Approval » » See instructions.)

☐ Special Course Fee____________________ (Must submit request to University Receivables.)

Contact: Sandy Cooper

Phone number: 335-8652

Campus mail code: 3113

Email: scooper@math.wsu.edu

Instructor, if different: Shiv Karunakaran

Chair/date: 10/19/15

Dean/date: 1/24/15

All-University Writing Com / date: 10/19/15

Chair (if crosslisted/interdisciplinary)*

Dean (if crosslisted/interdisciplinary)*

UCORE Committee Approval Date

Catalog Subcommittee Approval Date

GSC or AAC Approval Date

Faculty Senate Approval Date

*If the proposed change impacts or involves collaboration with other units, use the additional signature lines provided for each impacted unit and college.
Rationale for Math 594.

For a number of years the Department of Mathematics ran its research seminars under the catalog number Math 600. This fall it was pointed out to us by the Graduate School that this was an inappropriate use of that number and that we needed to establish separate courses for each of our regularly scheduled seminars. We are requesting temporary approval for Spring 2016 and permanent approval for Fall 2016 to offer the Mathematics Education Seminar as Math 594.
Math 594
Mathematics Education Seminar
Fall 2015

Facilitator: Shiv Karunakaran
Office: Neill 219
Phone: 335-3170
E-mail: shivk@math.wsu.edu
Office Hours: TuTh 9-10:15 am

Credit: 1 credit, may be repeated for credit; cumulative maximum is 10 credits
Meeting Time: Tuesdays: 4:10–5 PM; EdAd 112
Prerequisite: Graduate standing or permission of the instructor

Readings. Articles under discussion will be provided by the discussion leader each week and posted on the seminar google drive.

Course Description. The purpose of this seminar class is to provide an ongoing engagement with research in mathematics education. We will read and discuss literature from the mathematics education research field. Students who sign up for credit for this course are required to attend and participate in the seminar sessions. Moreover, students are required to lead or co–lead at least one (most likely more) discussion session.

This semester, we will be focusing on methodologies that are used with less frequency within the mathematics education research field. Although these methodologies are rarer than the “usual suspects” (Case studies, grounded theory, ethnographies, etc.), we should be aware of and familiar with these methodologies. Also, certain sessions are reserved for graduate students to present their current work and/or thoughts on their masters or doctoral theses. The students are encouraged to focus on the methodologies used or being considered for use.

Student Learning Outcomes.

1. At the end of the course, students will be able to find articles and discuss current lines of research in the field of mathematics education. This will be assessed through the requirement that each student select readings for one or more seminar meetings and lead the discussion that week. In preparation for the discussion the students will prepare questions related to the article and post the questions on the google drive with the article(s) under discussion that week (assessed through presentation of an article and by developing questions related to the article).

2. At the end of the course, students will be able to present current research findings. This will be assessed through a presentation of either their own research in progress or research findings related to their own work (assessed through the seminar presentation).

Grading Criterion. S,F grading. A grade of S is earned for attending the seminar every week, participating actively in the discussions, and leading at least one seminar during the semester. Leading a seminar involves the following:

- identifying an article,
- reading it carefully and preparing several questions for discussion,
- posting the article and questions on the google drive the week prior to the seminar being led, and
• facilitating the discussion.

If the seminar is focused on a student’s own research, then the student is responsible for the following:
• preparing a power point presentation of the research,
• posting an abstract of the research on the google drive the week prior to the presentation, and
• presenting the research during seminar.

To receive a grade of S, the students must not miss more than 2 seminars during the semester, actively participate in discussions each week demonstrating that s/he has read the materials posted each week, and be responsible for leading one or more of the weekly seminars over the course of semester.

In preparation for class each week, students should expect at least 2 hours work time outside of class. This work will involve finding and reading the research papers to be discussed that week. When you are the facilitator, plan to spend approximately 6 hours preparing as you will need to locate an article, get it approved, then read it and prepare questions for discussion.

**Attendance Policy.** You are expected to attend every seminar and be prepared to participate in the discussions. More than 2 unexcused absences over the course of the semester normally will result in a seminar grade of F for that semester.

**Academic Integrity.**
As an institution of higher education, WSU is committed to principles of truth and academic honesty. All members of the University community share the responsibility for maintaining and supporting these principles. To maintain the academic integrity of the community, the University cannot tolerate acts of academic dishonesty including any forms of cheating, plagiarism, or fabrication. WSU reserves the right and the power to discipline or to exclude students who engage in academic dishonesty. For more information about academic integrity, please read through [http://conduct.wsu.edu/](http://conduct.wsu.edu/).

**WSU Safety Measures.**
Washington State University is committed to maintaining a safe environment for its faculty, staff, and students. Please visit [http://safetyplan.wsu.edu](http://safetyplan.wsu.edu) and [http://oem.wsu.edu](http://oem.wsu.edu) to access the Campus Safety Plan and emergency information. Also, please visit the WSU Alert Site where information about emergencies and other issues affecting WSU will be found ([http://alert.wsu.edu/](http://alert.wsu.edu/)).

**Students with Disabilities.**
Reasonable accommodations are available for students with a documented disability. If you have a disability and need accommodations to fully participate in this class, please either visit or call the Access Center (Washington Building 217; 509-335-3417) to schedule an appointment with an Access Advisor. All accommodations MUST be approved through the Access Center. For more information contact a Disability Specialist (Pullman Campus contact info: [AccessCenter@wsu.edu](mailto:AccessCenter@wsu.edu), [http://accesscenter.wsu.edu](http://accesscenter.wsu.edu)).
<table>
<thead>
<tr>
<th>Date</th>
<th>Item to be discussed</th>
<th>Discussion Leader(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 25, 2015</td>
<td>Organizational Meeting</td>
<td>Shiv</td>
</tr>
<tr>
<td>September 1, 2015</td>
<td>Grad Research</td>
<td>Peter</td>
</tr>
<tr>
<td>September 8, 2015</td>
<td>Interpretative Case Research</td>
<td>Shiv</td>
</tr>
<tr>
<td>September 15, 2015</td>
<td>Interpretative Case Research (cont.)</td>
<td>Shiv &amp; Sandra Crespo</td>
</tr>
<tr>
<td>September 22, 2015</td>
<td>Discourse Analysis</td>
<td>Abby &amp; Spencer</td>
</tr>
<tr>
<td>September 29, 2015</td>
<td>Grad student research</td>
<td>Cameron</td>
</tr>
<tr>
<td>October 6, 2015</td>
<td>Cluster Analysis &amp; Factor Analysis</td>
<td>Silvia</td>
</tr>
<tr>
<td>October 13, 2015</td>
<td>Grad student research</td>
<td>Spencer</td>
</tr>
<tr>
<td>October 20, 2015</td>
<td>Structural Equation Modeling</td>
<td>Cameron &amp; Silvia</td>
</tr>
<tr>
<td>October 27, 2015</td>
<td>Grad student research</td>
<td>Abby</td>
</tr>
<tr>
<td>November 3, 2015</td>
<td>Structural Equation Modeling (cont.)</td>
<td>Visitor</td>
</tr>
<tr>
<td>November 10, 2015</td>
<td>Survey Research</td>
<td>TBD</td>
</tr>
<tr>
<td>November 17, 2015</td>
<td>Grad student research</td>
<td>Silvia</td>
</tr>
<tr>
<td>December 1, 2015</td>
<td>Microgenetic Learning Analysis</td>
<td>Abby &amp; Spencer</td>
</tr>
<tr>
<td>December 8, 2015</td>
<td>Grad student research</td>
<td>TBD</td>
</tr>
</tbody>
</table>