SOUTH DAKOTA BOARD OF REGENTS
New Course Request

SDSU Mathematics and Statistics
Institution Division/Department Institutional Approval Signature Date

Section 1. Course Title and Description

Prefix & No. Course Title Credits
MATH 091 Algebra for Statistics 1

Course Description: This course provides supplemental instruction in algebra to students co-enrolled in an introductory college level statistics course. Algebraic topics are sequenced in a manner that supports the needs of the co-requisite statistics course.

Note: This is remedial level course. No credit will be granted towards graduation.

Section 2. Review of Course

X This course will be a unique course.

Section 3. Other Course Information

1. Are there instructional staffing impacts? 
   X No, schedule management. Explain: Students enrolled in this class are those who would otherwise be enrolled in MATH 095. Creation of this class will result in a reduction in necessary staff for MATH 095, thus freeing staff to teach this course.

2. Existing program in which course will be offered: Developmental Mathematics

3. Proposed instructional method: D – Discussion/Recitation
   Provide a brief justification: Mastery-based, self-paced study has proven to be an extremely effective instructional method in courses of this nature.

4. Proposed primary delivery: 001 - Face to Face Term Based Instruction

5. Term in which change will be effective: Fall 2013

6. Can this course be repeated for additional credit? 
   X Yes, total credit limit: No

7. Will the grade for this course be limited to S/U (pass/fail)? 
   X Yes No

8. Will section enrollments be capped? 
   Yes, maximum per section X No

9. Will this course be equated (i.e. considered the same course for degree completion) with any other unique or common course in the course database? 
   Yes X No

10. Is this prefix already approved for your university? 
   X Yes No

Section 4. To be completed by Academic Affairs

1. University department code: SMATH

2. Proposed CIP code: 27.0101 Mathematics
   Is this a new CIP code for this university? X No
NEW COURSE REQUEST
Supporting Justification for On-Campus Review

Kurt Cogswell
Request Originator
Signature
11.06.12
Date

Lewis Brown
Department Chair
Signature
11.06.12
Date

School/College Dean
Signature
11.06.12
Date

1. Provide specific reasons for the proposal of this course and explain how the changes enhance the curriculum.
This course will enable some students who would otherwise be required to enroll in MATH 095 Pre-College Algebra to co-enroll in STAT 281 and MATH 091. This will accelerate these students into and through a credit-bearing course that satisfies SGR#5.
It will also allow students who place into MATH 102 and need only STAT 281 for their majors to skip MATH 102 and co-enroll directly in STAT 281 and MATH 091. This will accelerate these students through their STAT 281 requirement.

2. Note whether this course is:
   _____ Required
   X    Elective

3. In addition to the major/program in which this course is offered, what other majors/programs will be affected by this course?
   Any major requiring STAT 281 could see some of its students benefit from this course.

4. If this will be a dual listed course, indicate how the distinction between the two levels will be made.

5. Desired section size
   Determined by available facilities

6. Provide qualifications of faculty who will teach this course. List name(s), rank(s), and degree(s).
   Several MS-prepared mathematics Instructors and PhD-prepared tenure-track faculty members will be involved in teaching this course. All have appropriate levels of teaching experience.

7. Note whether adequate facilities are available and list any special equipment that will be needed.
   Adequate facilities are available.

8. Note whether adequate library and media support are available for the course.
   Yes.

9. Will the new course duplicate courses currently being offered on this campus? No

10. If this course may be offered for variable credit, explain how the amount of credit at each offering is to be determined. NA

11. Add any additional comments that will aid in the evaluation of this request.
   • Placement will be based on a new placement tool developed by the Math/Stat Department and approved for use by BOR. The tool incorporates both a traditional placement score (Math ACT) and the HS GPA, and has proven to be more effective for predicting success in this range of courses than placement by ACT alone. Data gathered from recent semesters and from an in-progress pilot test of this co-requisite instruction model will be analyzed to determine the optimum strategy for placement into these courses based on this new placement tool.
   • Students not selected for placement into these courses by the placement strategy referenced above will be placed in one of two versions of Math 095, again based on data-driven use of the new placement tool.
   • These courses will not be self-paced. They will proceed in fixed fashion parallel to their paired general education course. Thus, they will finish the courses whether or not they pass them.