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| Department | Math | College | Science |
| Course Rubric & Number | Math 4056 | Date | March 8, 2018 |

**FORM C**

**ADMINISTRATIVE**

**USE ONLY**

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| --- | --- | --- | --- |
|  | UACM |  | UPRE |
|  | UREL |  | RP |
|  | CAT |  | NOLIJ |

Effective: \_\_\_\_\_\_\_\_\_\_\_

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| Present Course Description | | | | | | | | | | | | |
| Title | Mathematical Statistics | | | | | | | | | | | |
| Semester Hours of Credit | | | | | | 4 | | | | | | |
| If combination course type, # hrs. of **credit** for | | | | Lecture: | | | | | | | Lab/Sem/Rec: | |
| Repeat Credit Max. (if repeatable): | | | | |  | | | | | | | |
| Graduate Credit? | | | | | | Yes  X | | | No | |
| Credit will not be given for this course and: | | | | | | | | |  | | | |
| **Contact** Hours Per Week: (Indicate hours in appropriate course type.) | | | | | | | | | | | | |
| Lecture  4\_\_ | | Lab | Seminar | | | | Recitation | | | Intern | Res/Ind | Clin/Pract |
| Total Weekly Contact Hours: | | | | | | | | 4 | | | | |
| Grading System: | | | | Letter Grade   X | | | | | | | Pass/Fail | |
| Course Description:  (Include course number, title, etc. exactly as it appears in the *General Catalog*) MATH 4056 Mathematical Statistics (4) Prereq.: MATH 3355. Statistical inference including hypothesis testing, estimators, and goodness-of-fit. Analysis of time series including moving-average, regression, autoregressive, and autoregressive-moving-average models. | | | | | | | | | | | | |

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| Proposed Course Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Title | Mathematical Statistics | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Short Title | | | | M | A | | T | | H | E | M | | | A | T | | I | | C | A | | | L |  | S | T | | A | T |  |  |
| Semester Hours of Credit | | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| If combination course type, # hrs. of credit for | | | | Lecture: \_3\_ | | | | | | | | | | | | | | | | | Lab/Sem/Rec: | | | | | | | | | | | |
| Repeat Credit Max. (if repeatable): | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Graduate Credit? | | | | | | \_\_X\_\_Yes | | | | | | No | | | | | |
| Credit will not be given for this course and: | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | |
| **Contact** Hours Per Week: (Indicate hours in appropriate course type.) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lecture  \_3\_ | | Lab | Seminar | | | | | Recitation | | | | | | | | Intern | | | | | | Res/Ind | | | | | Clin/Pract | | | | | |
| Total Weekly Contact Hours: | | | | | | | | | | | | | 3 | | | | | | | | | | | | | | | | | | | |
| Grading System: | | | | | | Letter Grade \_X\_ | | | | | | | | | | | | | | | | Pass/Fail | | | | | | | | | | |
| Course Description:  (Include course number, title, etc. exactly as it appears in the *General Catalog*) MATH 4056 Mathematical Statistics (3) Prereq.: MATH 3355. Statistical inference including hypothesis testing, confidence intervals, estimators, and goodness-of-fit. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

**THESE QUESTIONS MUST BE ANSWERED COMPLETELY AND ACCURATELY OR PROPOSAL WILL BE RETURNED.**

Has this change been discussed with and approved by all departments/colleges affected? **Yes** **No****N/A \_\_X\_\_**

Is this course included in any curricula, concentrations, or minors? **Yes\_\_X\_\_ No**If yes, please list on a separate sheet.

Is this course a prerequisite or corequisite for other courses? **Yes****No\_\_X\_\_** If yes, list courses; use separate sheet.

Is this course on the General Education list? **Yes****No \_\_X\_\_**

**JUSTIFICATION/EXPLANATION:** Use separate sheet.

**Note:** IF COURSE IS OR WILL BE CROSS-LISTED, SEPARATE FORMS MUST BE SUBMITTED BY EACH DEPARTMENT.

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| Approvals | | | |
| Department Faculty Approval Date | April \_, 2018 | College Faculty Approval Date |  |

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Department Chair Signature (date) College Dean Signature (date)

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Graduate Dean Signature (date) Chair, FS C&C Committee (date)

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College Contact E-mail Academic Affairs Approval (date)

**A SAMPLE SYLLABUS IS REQUIRED FOR ANY OF THE FOLLOWING:**

* A change in credit hours
* A change in the distribution of hours (combination course type)
* Any substantial change to the course description

NOTE: Form C is not to be used for changes in course rubric or numbering. When the number/rubric of a course is being changed, Form A *and* Form B must be submitted to add the course with the new number/rubric and to drop the course with the original number/rubric.

**One original copy of each request must be submitted.**

All questions must be answered. The course proposal will be delayed until the form is filled out completely and correctly. Proposals should be submitted early enough to obtain final approval before the desired effective date.

**Dates** of departmental and college approval of the proposal must be recorded. The Faculty Senate Courses and Curricula Committee will not consider curricular proposals that have not been approved by college/departmental curriculum committees. Please provide the **college/division/departmental contact’s name and email address**, in case of further questions/concerns that may be related to the proposal.

Most items are self-explanatory. The complete present and proposed catalog entries must be provided. Proposed **course descriptions** should follow standard catalog format (See Appendix C for a key to catalog abbreviations and standard catalog wording). Although there is no specific word limit, course descriptions should be concise.

The **short title** appears on transcripts and in the scheduling booklet. It may not exceed 19 characters.

For group courses (lecture, lab, seminar, recitation) **contact hours** refer to the number of hours spent each week with faculty in a classroom or lab setting. For lecture, seminar, and recitation courses, contact hours are generally equal to semester credit hours. For laboratory courses, two or more laboratory contact hours are required to yield a single laboratory credit hour. For individual courses (such as research/ independent study, clinical practicum, or internships) contact hours are less well defined, as these courses may involve minimal contact with faculty in classroom settings. For these courses, contact hours are generally set to equal the maximum number of credit hours permitted for the course.

Departments with curricula that include this course and/or courses for which this course is a prerequisite or corequisite must be identified and notified in writing. Any responses from colleges/departments affected by the proposal should be attached to form C. **If changes to this course affect any curricula, concentrations or minors, separate proposals to change any affected areas must also be submitted before this proposal will be presented to the Faculty Senate Courses and Curricula Committee.**

If the course is on the general education list, the Faculty Senate General Education Committee must also be notified by the department.

If the course is cross-listed, catalog descriptions for both departments and approval signatures of each dean and chair concerned should be submitted

**Summary of and Justification for the credit-hour increase in Math 4056**

Math 4056 covers the Society of Actuaries syllabus for Validation by Educational Experience (VEE) approval in Mathematical Statistics. A new set of requirements takes effect in June 2018 and this course is restructured to align with the new requirements. One of the changes initiated by the Society of Actuaries is to remove time-series from VEE requirements and put it in another course. Hence Math 4056 has time-series removed and a reduction of one hour lecture and credit.

**Courses, Curricula, Colleges, Offices, Concentrations, and Minors that mention Math 4056**

A. *College of Science*

A.1. Minor in Math.

A.2. Concentration in Mathematical Statistics, Curriculum in Math (Department of Math).

A.3. Concentration in Actuarial Science, Curriculum in Math (Department of Math).