**Purdue Northwest Curriculum Document Coversheet**

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| **Document No:**  (According to [Instruction](http://faculty.pnw.edu/blog/curriculum-document-approval-procedures/)s[[1]](#footnote-1)) | CES 18-16 NEW PROG STAT | **Approval by Faculty Senate:**  (Leave Blank) | 3/8/2019 |
| **Proposed Effective Date** | Fall 2019 | **Date Reviewed by Senate Curriculum**  **Committee:**  (Leave blank) | 2/22/2019 |
| **Submitting Department:**  (Name of both Dept & College/School ) | MSCS/CES | **Name(s) of Library Staff Consulted:**  (NA if not required) | N/A |
| **Date Reviewed by Department** | 11/16/18 |  |  |
| **Submission Date:**  (Date sent to College/School Curr Comm after Dept Review) | 11/20/18 | **Will New Library**  **Resources Used?** | **Yes** **No**  Double-click to check Yes / No. |
| **Date Reviewed by College/School Curriculum Committee** | 12/14/18 | **Form 40 Needed?**  (Double-click one box.)  Registrar will complete Form 40 **after** Senate approval of document. | **Yes** New courses or any course change, check **YES**  **No** For **all other** curriculum matters, check **NO**. |
| **Contact Person(s):**  (Name & Title) | Dr. Jonathan Kuhn, Associate Professor of Statistics; Dr. Catherine Murphy, Head, MSCS |  |  |

Unless marked “Leave blank” all parts of this form must be filled in **before** sending to Secretary of the Faculty Senate.

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| **Task (check all that apply and fill out sections appropriate for each change).**  Program/Concentration Change or New Program/Concentration Proposal: Complete Section I, III, & IV  Minor Change or New Minor Proposal: Complete Section I (delete sections III & IV)  Certificate Change or New Certificate Proposal: Complete Section I (delete sections III & IV)  Course Change or New Course Proposal: Complete Section II (delete sections III & IV) |
| **Program name**.  Bachelor of Science in Applied Statistics |
| **Degree name(s).** (If applicable.)  Bachelor of Science in Applied Statistics |

**Section II: This section is for changes in courses only**

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| **Subject.** Senior Seminar in Statistics (new course): Each student chooses from a variety of statistical analysis techniques to investigate and report on a number of case study projects; that is, a variety of different statistical methods are applied to data sets in a number of different fields. |
| **Justification.** This is the capstone course to the major, where students use methods taught in the major to undertake a project, or projects, for presentation to students and faculty. This course would also allow room for any statistical topic not covered in the major, to study this topic in greater depth, to accommodate student and instructor interests. This would prepare students for the practical challenges of data analysis. |

Use the **Current** and **Proposed** spaces below for course changes only. Otherwise, mark “N/A”

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| **Current:** (Course changes: include entire present catalog information. Leave blank if new course)  N/A | | **Proposed:** (Course changes: include entire new catalog information.)   |  | | --- | | **STAT 46900 – Senior Seminar in Statistics**  Credit Hours: 3.00. Each student chooses from a variety of statistical analysis techniques to investigate and report on a number of case study projects; that is, a variety of different statistical methods are applied to data sets in a number of different fields. Statistical methods may include but are not restricted to regression analysis, experimental design, time series analysis, categorical analysis, applied multivariate statistical analysis, statistical learning, data mining, nonparametric models, stochastic processes, and statistical quality control. This capstone course provides a summary of how statistical ideas are useful in understanding and designing research in many areas of study. Statistical computer programs are used. Typically offered Fall, Spring.  **Levels:** Graduate, Professional, Undergraduate **Schedule Types:** classroom, hybrid, online  **Prerequisites: minimum grade of C from STAT 46600, STAT 46700, and STAT 46800** | |
| **Is this course also:** | **General Education** | **Currently Designated ExL (see** [**instructions[[2]](#footnote-2)**](http://faculty.pnw.edu/blog/curriculum-document-approval-procedures/)**)** |

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| **Course Objectives / Learning Outcomes.** (New courses only. List main outcomes. If lengthy, attach separate page.)   1. Demonstrate an ability to critically read, reflect upon, and summarize statistical findings 2. Demonstrate the ability to perform appropriate statistical analysis of the data under study 3. Organize and communicate comprehensive scientific information in a logical and effective manner |
| **Impact on Students.** (State “N/A” if proposal will not greatly affect students.) |
| **Impact on University Resources.** (State “N/A” if proposal will not require new resources, faculty or funds.) |
| **Impact on other Academic Units.** (State “N/A” if proposal will not affect other units.) (Include name of person in affected area this was discussed with.) |

(Boxes will expand and spill over onto next page to accommodate your typing.)

1. <http://faculty.pnw.edu/blog/curriculum-document-approval-procedures/> [↑](#footnote-ref-1)
2. <http://faculty.pnw.edu/blog/curriculum-document-approval-procedures/> [↑](#footnote-ref-2)