

WINONA STATE UNIVERSITY
NEW AND REVISED COURSE AND PROGRAM APPROVAL FORM

Routing form for new and revised courses and programs.

Course or Program DSCI 495 – Communication of Capstone Outcomes


Department Recommendation


Department Chair

1/24/14
Date

bdeppa@winona.edu
e-mail address

Dean's Recommendation ☒ Yes ☐ No*


Dean of College

1/29/14
Date

*The dean shall forward their recommendation to the chair of the department, the chair of A2C2, and the Vice President for Academic Affairs.

A2C2 Recommendation ☐ Approved ☐ Disapproved

Chair of A2C2 Date

Graduate Council Recommendation ☐ Approved ☐ Disapproved
(if applicable)

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

WINONA STATE UNIVERSITY

PROPOSAL FOR A NEW COURSE

This form is to be used to submit a proposal for a new undergraduate or graduate course. Every item on this form must be completed prior to submission to A2C2. The department proposing a new course must include a ***Financial and Staffing Data Sheet*** and a ***New and Revised Course and Program Approval Form*** with the department chairperson's and Dean's signatures. Refer to Regulation 3-4, ***Policy for Changing the Curriculum***, for complete information on submitting proposals for curricular changes.

Department Department of Mathematics and Statistics

Date January 20, 2014

DSCI 495
Course No.

Communication of Capstone Outcomes
Course Title

1
Credits*

This proposal is for a(n): X Undergraduate Course Graduate Course

Is this course for USP? Yes** X No Is this course for GEP? Yes** X No

List all Major Codes to which this proposal applies as a required course: DSCI

List all Major Codes to which this proposal applies as an elective course:

List all Minor Codes to which this proposal applies as a required course:

List all Minor Codes to which this proposal applies as an elective course: DSCI

Prerequisites DSCI 395 and DSCI 488 or DSCI 492, or permission of instructor

Grading method Grade only P/NC only X Grade and P/NC Option

Frequency of offering Yearly

What semester do you anticipate that will this course be offered for the first time? Spring 2015

Note: The approval process for a new course typically takes at least four to six weeks

* If this course will change the number of credits for any major or minor, the form ***Proposal for a Revised Program*** must also be submitted and approved according to the instructions on that form.

For General Education Program (GEP) or University Studies (USP) course approval, the form *Proposal for General Education Courses*** or ***Proposal for University Studies Courses*** must also be completed and submitted according to the instructions on that form.

Please provide all of the following information:

(Note: a syllabus or other documentation may not substitute for this)

A. Course Description

1. Description of the course as it will appear in the WSU catalog, including the credit hours, any prerequisites, and the grading method.
If the course can be repeated, indicate the maximum number of credit hours for which this can be done.

DSCI 495 – Communication of Capstone Outcomes (1 S. H.)

Students will disseminate their capstone outcomes in this course. Students will be required to complete a professional poster, create and present a professional presentation, and create a professional written report. Prerequisites: DSCI 395 – Professional Skill Development in Data Science and DSCI 488 – Data Science Project or DSCI 492 – Internship in Data Science, or permission of instructor. Offered yearly.

2. Course outline of the major topics, themes, subtopics, etc., to be covered in the course. This outline should be, at a minimum, a two-level outline, i.e., consisting of topics and subtopics. This information will be submitted to MnSCU by the WSU Registrar's office.

1. Creating a Poster

- a. Critique, analyze, and evaluate past data science posters using well-established rubrics
- b. Create a professional poster of the outcomes from their capstone project

2. Presentation

- a. Rubrics for the evaluation of professional presentations
- b. Create and present a professional quality presentation of the outcomes from their capstone project

3. Written Report

- a. Rubrics for the evaluation of technical writing and/or written reports
- b. Create a professional quality written document in which outcomes from their capstone project are discussed in detail

3.a Instructional delivery methods utilized: (Please check all that apply).

Instructional delivery methods utilized: (Please check all that apply):				
Auditorium/Classroom :	ITV	Online	Web Enhanced	X Web Supplemented
Laboratory:	Service Learning	Travel Study	Internship/Practicum	
Other: (Please indicate)				

3.b. MnSCU Course media codes: (Please check all that apply).

None:	3. Internet	6. Independent Study	9. Web Enhanced
1. Satellite	4. ITV Sending	7. Taped	10. Web Supplemented X
2. CD Rom	5. Broadcast TV	8. ITV Receiving	

4. Course requirements (papers, lab work, projects, etc.) and means of evaluation.

Students will be required to

1. Create a poster of their findings
2. Create and present an oral presentation of their findings
3. Create a detailed written report of their findings

The following is provided as a guide for means of evaluation.

Grade	Worked completed
A	All course requirements were completed at a professional level
B	Two of the course requirements were completed at a professional level and the other was finished, but not at a professional level
C	All course requirements were completed with no more than one at a substandard level
D	All course requirements were completed with two or more at a substandard level
Pass, for P/NC option	All course requirements were completed with no more than one at a substandard level

5. Course materials (textbook(s), articles, etc.).

Possible curriculum resources include:

1. Smith-Worthington, D., Jefferson, S., (2010). Technical Writing for Success. Cengage Learning. ISBN: 978-0-538-45048-5
2. Gurak, L., Dragga, S., (2000). Presentations for Technical Communication. Alley & Bacon Publishing. ISBN:978-0-205-29415-2

3. Nicol, A., Pexman, P. (2010). Displaying Your Findings: A Practical Guide for Creating Figures, Posters, and Presentations, 6th Edition. American Psychological Association. ISBN:978-0-433-80707-7

6. List the student learning outcomes for this course and how each outcome will be assessed.

Learning Outcomes	Methods of Assessment
Students will construct a professional quality poster	<ul style="list-style-type: none">• Evaluation of poster using a well-established rubric
Students will create and deliver a professional quality presentation	<ul style="list-style-type: none">• Evaluation of presentation using a well-established rubric
Students will produce a detailed written report of their capstone project	<ul style="list-style-type: none">• Evaluation of written work using well-established rubrics or other widely accepted methods of evaluation. Student should be allowed to resubmit written work in order to meet this requirement.

B. Rationale

Provide a rationale for the new course. The rationale should include the following items.

1. A statement of the major focus of the course.

The digitalization, storage, and dissemination of capstone project outcomes is not uniform within our Department. This 1 S. H. course will be used to create a common set of expectations across students. The streamlining of the dissemination process will improve our program level evaluation procedures as the digitalization and storage of completed projects will be more consistent.

2. A statement of how this course will contribute to the departmental curriculum.

This course will create a common set of expectations for the digitalization and dissemination of capstone outcomes.

3. A statement of why this course is to be offered at this level (i.e. 100-, 200-, 300-, 400-, or 500-level)

The 400-level designation and high number is appropriate as this course will likely be taken the same semester as the student graduates.

4. Identification of any courses which may be dropped, if any, if this course is implemented.

None.

C. Impact of This Course on Other Departments, Programs, Majors, and Minors

Provide a statement of the impact of this course on other departments, programs, majors, and minors.

1. Clearly state the impact of this course on courses taught in other departments. Does this course duplicate the content of any other course? Is there any effect on prerequisites for this or any other courses?

This course does not impact other departments. The prerequisites course will be offered on a regular basis.

2. Would approval of this course change the total number of credits required by any major or minor of any department? If so, explain the effects which this course would have.

Yes. This course will be part of our new data science major. It can also be used as an elective in the data science minor.

3. If this course has an impact on the major or minor of any other department or program, it is the responsibility of the department submitting the course proposal to send written notification to the department(s) or program(s) affected. State clearly which other programs are affected by this proposal and whether the other departments have been notified and/or consulted. Attach letter(s) of understanding from impacted department(s).

To our knowledge, no existing curriculum will be adversely impacted by the creation of this course.

D. Attach to This Proposal a Completed

1. *Financial and Staffing Data Sheet*
2. *New and Revised Course and Program Approval Form*

E. Department Contact Person for this Proposal:

<u>Christopher Malone</u>	<u>457-2989</u>	<u>cmalone@winona.edu</u>
Name (please print)	Phone	e-mail address

F. Review by Department A2C2 Representative

I have reviewed this proposal and certify that it is complete


Signature of A2C2 representative

Definitions for codes in 3a and 3b:

01-Satellite:

02- CD ROM:

03- Internet: Predominately = where all, or nearly all, course activity occurs in an online environment. One to two activities may occur face-to-face in a classroom, with the maximum being two activities.

04 – ITV Sending: a course in which students are in the classroom with the instructor, other students join via interactive television technology from other geographically separate locations

05 – Broadcast TV:

06 – Independent Study: a course in which the teacher develops specialized curriculum for the student(s) based on department guidelines in the University course catalog

07 – Taped: a course in which the teacher records the lessons for playback at a later date

08 – ITV Receiving: a course in which students are not in the classroom with the teacher, other students join via interactive television technology from other geographically separate locations

09 – Web Enhanced- Limited Seat Time: For a course in which students are geographically separate from the teacher and other students for a majority of required activities. However, some on-site attendance is required. The course includes synchronous and/or asynchronous instruction.

10 – Web Supplemented- No Reduced Seat Time: For a course utilizing the web for instructional activities. Use of this code may assist your college/university in tracking courses for “smart classrooms” and/or facility usage.

WINONA STATE UNIVERSITY
FINANCIAL AND STAFFING DATA SHEET

Course or Program DSCI 495

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.

This course will be taught with existing staff. The creation of this course will have minimal impact on staffing. In the beginning, one section of this course will be offered each year.

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.

This is a new course and initially we anticipate enrollments to be low as our new data science major develops. For this reason, this course will be offered at the same time and location as DSCI 395: Professional Skill Development for Data Science, STAT 395: Professional Skill Development for Statistics, and STAT 495: Communication of Capstone Outcomes.

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.

None.

Winona State University - Department of Mathematics & Statistics
Minutes of the Department Meeting on 1/24/14

Present: Joyati Debnath, Brant Deppa (chair), Jeff Draskoci-Johnson, Eric Errthum, Tisha Hooks, April Kerby, Steve Leonhardi, Chris Malone, Mike Markegard, Barry Peratt, Sam Schmidt, Samuel Tsegai, Aaron Wangberg, Nicole Williams, Lee Windsperger

New Business: Note: All of the items below were considered after the department waived the 40-hour rule without objection.

Motions from the Statistics Subgroup

1. STAT 100 – new course proposal and GEP proposal

The new STAT 100 course proposal and GEP proposal were approved without objection.

2. New program: B.S. Data Science (DSCI) major, minor, and courses

(i) The department approved two versions of the major, both without objection. The Math department indicated a preference for Version 2, but voted to accept Version 1 if Computer Science preferred that one. Chris was directed to submit whichever one Computer Science preferred. (Their discussion was still pending as of our meeting.)

(ii) The minor was approved without objection, also with the understanding that Computer Science might want to edit certain courses in the elective list.

(iii) All new courses associated with the proposed data science major were approved without objection. These include DSCI 210, DSCI 310, DSCI 395, DSCI 488, DSCI 492, and DSCI 495.

(iv) The notifications for the conversion of STAT 325 to DSCI 325 and STAT 425 to DSCI 425 were approved without objection.

3. Program revisions: B.S. Statistics (STAT) major, minor, and courses

(i) All revisions, both to the major and to the minor were approved without objection.

(ii) STAT 395 and STAT 495, i.e. the analogous courses to DSCI 395 and DSCI 495, were approved without objections.

Supporting documentation for items 1 – 3 above were sent to the department by Tisha Hooks (STAT 100) and Chris Malone (DSCI and STAT programs) via e-mail (01/22/14).

4. Notifications re: STAT

The following notifications seek Departmental approval. 1) In Spring, 2013, the department voted to make STAT 310 the prerequisite for a number of upper-division STAT courses. Either this paperwork was not submitted, or got lost. 2) The note in the course description for STAT 305 was corrected to read STAT 305 instead of Math 305. 3) A notification to edit course description slightly and to allow ECON 222 to serve as a possible prerequisite for STAT 310. 4) Include DSCI 210 as a prerequisite for STAT 370.

The department approved the submission/resubmission of all of these notifications.

5. Notifications re: MATH courses

The following notifications were submitted for departmental approval. (i) A change in course title for MATH 112 from "Modeling with Functions" to "Applied Precalculus" (ii) A change in the catalog description of MATH 112. (See the catalog language at the end of these minutes.) (iii) A change in number for MATH 140 to MATH 132 AND a change in prerequisites from "MATH 112 - Modeling with Functions, MATH 115 - College Algebra, or MATH 120 - Precalculus" to "MATH 112 – Applied Precalculus, MATH 115 - College Algebra, or MATH 120 - Precalculus" (iv) A change in the catalog description of MATH 132. (See the catalog language at the end of these minutes.)

The department approved all of these changes without objection.

6. Proposal re: MATH 117 from Steve, Barry, and Jeff

The department approved without objection the proposal to submit MATH 117 as a new course and also the proposal to submit it as a GEP course under Goal 4. Since the Math Subgroup had not had a chance to vote on the committee's work, the department waived normal procedures without objection. (The documents were handed out in the meeting.)

Secretary's note: If there is any confusion as to what, exactly, the department agreed to in Items 1-6 above, I can supply copies of the A2C2 paperwork upon request. Summaries of the proposals re: data science and statistics are attached below.

7. Adjourn

We adjourned about 12:50 p.m.

Respectfully submitted,
Jeff Draskoci-Johnson