

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 **Mass Communication**

Date **02/18/2014**

Course No. **271** Course Title **Introduction to Interactive environments** Credits* **3**

This proposal is for a(n): **XXXX** Undergraduate Course _____ Graduate Course

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

List all Major Codes to which this proposal applies as a required course: **MCTM** (new major code)

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: **MCOM**

Prerequisites **None**

Grading method **XXXX** Grade only _____ P/NC only _____ Grade and P/NC Option

Frequency of offering **Every other semester**

What semester do you anticipate that will this course be offered for the first time? _____ Fall 2014 _____

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

271 Introduction to Interactive Environments

The technological advances in today's mass media environment are changing both how we consume media and the content of the media. This course provides an introduction to the tools necessary for developing content and delivering messages in these new media environments introducing the Processing programming language. The course will have a special emphasis in data visualization and parsing data from the web.

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.

1/Hello.

Sketching and Prototyping

Flexibility

Giants

Family Tree

Join In

2/Starting to Code.

Your First Program

Show

Save

Share

Examples and Reference

3/Draw.

Basic Shapes

Drawing Order

Shape Properties

Color

Custom Shapes

Comments

Robot 1: Draw

4/Variables.

Making Variables

Processing Variables

A Little Math

Repetition

Robot 2: Variables

5/Response.

Follow

Map

Click

Location

Type

Robot 3: Response

6/Media.

Images

Fonts

Shapes

Robot 4: Media

7/Motion.

Speed and Direction

Tweening

Random

Timers

Circular

Translate, Rotate, Scale

Robot 5: Motion

8/Functions.

Function Basics

Make a Function

Return Values

Robot 6: Functions

9/Objects.

Classes and Objects

Robot 7: Objects

10/Arrays.

Make an Array

Repetition and Arrays

Arrays of Objects

Robot 8: Arrays

11/Extend.

3D

Image Export

Hello Arduino

Community

A/Coding Tips.

B/Data Types.

C/ Order of Operations.

D/Variable Scope.

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

| | | | | |
|--|------------------|--------------|----------------------|------------------|
| Auditorium/Classroom : Lecture | ITV | Online | Web Enhanced | Web Supplemented |
| Laboratory: | Service Learning | Travel Study | Internship/Practicum | |
| Other: (Please indicate) | | | | |

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

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

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

1. Students will complete a series of exercises associated with the units in the course

2. Students will complete a final project that incorporates all the skills learned from exercises: a summative assessment using a rubric based on student learning outcomes will be made of the final project .

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

Getting Started with Processing Casey Reas and Ben Fry. Published June 2010, O'Reilly Media. 208 pages. Paperback.

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

Learning outcomes:

- 1. Students will understand the common terms of any programming language.**
- 2. Students will be introduced to the structure of a program in Processing.**
- 3. Students will be able to comment any line of the code of a program.**
- 4. Students will be able to program simple behaviors.**
- 5. Students will be able to pseudocoding complex behaviors.**

7. List of references.

- Processing: A Programming Handbook** by John Maeda). Published August 2007, MIT Press. 736 pages.
- Visualizing Data**
Ben Fry.
Published December 2007, O'Reilly. 384 pages. Paperback.
- The Nature of Code: Simulating Natural Systems with Processing**
Daniel Shiffman.
Published December 2012. PDF, Web, Paperback.
- Learning Processing: A Beginner's Guide to Programming Images, Animation, and Interaction**
Daniel Shiffman.
Published August 2008, Morgan Kaufmann. 450 pages. Paperback.
- Generative Design**
Hartmut Bohnacker, Benedikt Gross, Julia Laub, and Claudius Lazzeroni.
August 2012, Princeton Architectural Press. 472 pages.
Originally published in German November 2009, Schmidt Hermann Verlag. 500 pages.
- Processing: Creative Coding and Generative Art in Processing 2** Ira Greenberg, Dianna Xu, Deepak Kumar. Published April 2013, friends of ED. 472 pages. Paperback.
- Processing for Visual Artists: How to Create Expressive Images and Interactive Art**
Andrew S. Glassner.
Published August 2010, AK Peters. Paperback.
- Processing: Creative Coding and Computational Art (Foundation)**
Ira Greenberg (Foreword by Keith Peters).
Published May 2007, Friends of Ed. 840 pages. Hardcover.
- The Essential Guide to Processing for Flash Developers**
Ira Greenberg (Foreword by Daniel Shiffman).
Published December 2009, Friends of Ed. 489 pages. Paperback.

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.
 1. **Statement of the major focus and objectives of the course.**
The major focus of this course is to explain the basic concepts of programming based on the Processing Environment.

Some of the objectives of the course include:

1. **Understanding the relation between code and its output.**
 2. **Familiarizing students with the most elementary kind of behavior.**
2. A statement of how this course will contribute to the departmental curriculum.
This course is a core professional skills course for the Transmedia track and it is required to complete.
 3. A statement of why this course is to be offered at this level (i.e. 100-, 200-, 300-, 400-, or 500-level)
This is an introductory course and a prerequisite for advanced courses in the option.
 4. Identification of any courses which may be dropped, if any, if this course is implemented.
This course is part of the merging of Electronic Media and Photo/Digital Imaging options in the Mass Comm major. It will replace 220 Broadcast Writing, 310 Photo and Digital Imaging, 312 Visual Perception and Imaging and 328 Advanced Audio Production.

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 increase nor decrease the total credits required by a major or minor in any other department nor does this course duplicate content of any other course offered at WSU. The course is part of the Mass Communication's revised program and is offered only to students with a Mass Communication major or minor.
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.
NO
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).

This course does not impact any other program or department outside of Mass Comm.

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:

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 _____ MCOM 271 _____

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.

MCOM 271 Introduction to Interactive Environments

This course will be taught by existing probationary faculty. It is part of a reorganization of the Mass Comm curriculum explained in greater detail in the Program Revision document. The department was informed this year that the fixed-term position that we have had for several years will not be renewed for the 14-15 academic year. This course is part of the reorganization.

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 course is part of the merging of Electronic Media and Photo/Digital Imaging options in the Mass Comm major. It will replace 220 Broadcast Writing, 310 Photo and Digital Imaging, 312 Visual Perception and Imaging and 328 Advanced Audio Production.

These courses will be offered to "teach out" current majors, and then banked.

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.

The department's equipment allocation is sufficient to absorb the cost for this course. The equipment needs of the two options being discontinued (Electronic Media and Photo/Digital Imaging will be redirected to the new Transmedia option.