

# CS - 390X - Open Source Software (Fall 2019)

z01. UG New Omnibus Course (18-19)

## General Course Information

### **\*\*Read before you begin\*\***

1. Please turn on the help text before starting this proposal by clicking on the  icon in the top right corner of the heading.

2. All fields with an \* are required. You will not be able to launch the proposal without completing required fields.

NOTE: Omnibus courses may be offered only three times before a regular course must be proposed for the Catalog.

#### DUE DATES:

For Spring 2019: Received in the Dean's office September 14, 2018

For Summer 2019: Received in the Dean's office January 28, 2019

For Fall 2019: Received in the Dean's office February 8, 2019

You can consult the [Curriculum Website](#) or the [Procedural Calendar](#) on the Academic Affairs Website for the most up to date information on curriculum due dates

For Additional Assistance and Step-by-Step Instructions on completing this form, consult this document: [Omnibus Form Assistance](#)

College/School\*

College of Letters, Arts and Sciences

Department\* Department of Mathematical and Computer Sciences

Status\*  Active-Hidden

Prefix\* CS Course Number\* 390X

Course Type\* Computer Science

Course Title (include Semester and date for course to run)\* Open Source Software (Fall 2019)

Transcript Course Title\* Open Source Software

Is this a study abroad course?\*  No  Yes

Equivalent/Crosslisted?  Equivalent  Crosslisted

List all equivalent courses:

List all crosslisted courses:

To receive Title IV financial aid funds, all institutions of higher education must comply with the federal definition of a credit hour. The Higher Learning Commission requires institutions to maintain policies and procedures for verifying compliance with this definition.

***Federal Credit Hour Definition: A credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally-established equivalency that reasonably approximates not less than:***

***(1) one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or (2) at least an equivalent amount of work as required in paragraph (1) of this definition for other activities as established by an institution, including laboratory work, internships, practica, studio work, and other academic work leading toward to the award of credit hours. 34CFR 600.2 (11/1/2010)***

Credit Hours\* 4

Distribution of Credit Hours\*

4 + 0

Schedule Type:\*

Lecture

Grade Mode:\*

Letter

Face-to-Face or Equivalent Hours per course:

Consult the Appendices of the [Curriculum Manual](#) to determine the hours for the course (appendices begin on page 33 of the document)

Lecture: 60

Lab: 0

Internship: 0

Practicum: 0

Other:

Additional Student Work Hours per course:\*

120

Specified repeatable course:\*

No  Yes

If yes, number of credits/ repeats allowed

Prerequisite(s):

CS 2050

Corequisite(s):

Prerequisite(s) and/or Corequisite(s):

CS 3250

Banner Enforced Prerequisite(s):

CS 2050

Minimum passing grade for Banner enforced prerequisite course(s):

C-

**Banner Enforced  
Corequisite(s):**

**Minimum passing  
grade for Banner  
enforced corequisite  
course(s):**

**Banner Enforced  
Prerequisite(s)  
and/or  
Corequisite(s):**

CS 3250

**Minimum Passing  
Grade for Banner  
Enforced  
Pre/Corequisites**

C-

**Registration restrictions (optional):**

**Level**

**Class**

**Program**

**Student attribute**

**Major**

**Other Registration  
Restriction(s):**

**Course  
Description:\***

The source code for *Open Source Software* is available to others to view, copy, learn from, alter, or share. This course delves into the *Open Source Software* movement addressing: advantages and disadvantages of open source; open source licensing models; collaborative public development; common and best practices; and, how to contribute to *Free and Open Source Software* (FOSS) projects. During the course, students will actively investigate, engage with, and have guided opportunities to contribute to established FOSS projects.

**Required Reading and Other Materials will be equivalent to:\***

Haff, G. (2018) *How Open Source Ate Software: Understand the Open Source Movement and So Much More*. Apress. ISBN: 9781484238943

Fogel, K. (2018) *Producing Open Source Software: How to Run a Successful Free Software Project*. <http://producingoss.com/> (Accessed 27 January 2019)

Online articles, weblogs, and FOSS project documentation

**Specific, Measurable Student Behavioral Learning Objectives:\***

Upon completion of this course the student should be able to

1. Describe the principles of Open Source
  1. Open Source (generic)
  2. Open Source Software (OSS)
  3. Free and Open Source Software (FOSS)
2. Determine the potential for humanitarian benefit of a FOSS project (Humanitarian Free and Open Source Software, HFOSS)
3. Assess the appropriateness of a FOSS project for contribution
  1. Evaluate the characteristics of a FOSS project
  2. Determine the fit of a candidate project to an identified developer or development team
4. Formulate a plan for contributing to a FOSS project
5. Execute a plan for contributing to a FOSS project
6. Judge stakeholders' benefits, costs, and risks associated with embarking on a new FOSS project

**Detailed Outline of Course Content (Major Topics and Subtopics) or Outline of Field Experience/ Internship\***

1. Open Source Concept and Movement
2. Open Source Software
  1. Free and Open Source Software
  2. Humanitarian Free and Open Source Software
3. Open Source Licensing
  1. Copy-Left
  2. Common licenses
  3. Custom licenses
4. Advantages & Disadvantages of Open Source Software
5. Principles, Tools, and Practices of Open Source Software
  1. Collaborative Public Development
  2. Communication modes
  3. Open Source Development Tools
  4. Common Development Practices
  5. Best Practices for Open Source Development
6. Contributing to Open Source Software Projects

**Evaluation of Student Performance\***

1. Written responses to readings
2. Written reflections on activities
3. Assignments
4. Projects

**Course Proposal Objective(s)**

**Learning Objectives**

No Learning Objectives

According to the Undergraduate Curriculum Manual, it is the responsibility of both the originator as well as each level of review to consider potential overlap and curriculum conflict. Any potential overlap or conflict with existing curriculum should be reviewed, and the impacted department(s) should be requested to provide a letter of notification or support, depending on the circumstances. Full information on overlap/conflict can be found [here](#) and [here](#).

**Please confirm that:\***

- I, the originator of this proposal, have completed the necessary due diligence to review this proposal for any potential overlap and/or conflict with existing curriculum.

**Please confirm that:\***

- Any departments identified as having potential overlap and/or conflicts have been contacted and a letter of notification and/or a letter of support has been obtained.