

**ROUTE SHEET**  
**PERMANENT COURSE CHANGE/APPROVAL**  
(Attach course change request form)

Prefix & Number CS 577 Course Title Open Source Software Development

Abbreviation for Schedule (20 characters): Open Source Dev

Nature of course request (Mark all that apply)

- |  |  |   |
|--|--|---|
| <input checked="" type="checkbox"/> Add a course   | <input type="checkbox"/> Prerequisite change         | <input type="checkbox"/> LACC course                |
| <input type="checkbox"/> Delete a course           | <input type="checkbox"/> Number/Prefix change        | <input type="checkbox"/> Undergraduate course       |
| <input type="checkbox"/> Title change              | <input type="checkbox"/> Description change          | <input checked="" type="checkbox"/> Graduate course |
| <input type="checkbox"/> Writing Intensive (WI)    | <input type="checkbox"/> Multicultural Diversity (D) | <input type="checkbox"/> 400/500 course             |
| <input type="checkbox"/> Quantitative Literacy (Q) | <input type="checkbox"/> Honors course (H)           | <input type="checkbox"/> Other: _____               |

1) Faculty Sponsor Signature [Signature] Date 2/21/14

2) Dept./Program Coordinator [Signature] Date 2/20/14

3) Division Chair [Signature] Date 2/20/14

Curriculum Chair [Signature] Date 2/20/14

4) Faculty Senate Committees: The Curriculum Committee reviews all course proposals except for honors and graduate courses, which are reviewed instead by the Honors Committee or Graduate Committee. All 400/500 "split" courses must be approved by both the Curriculum and Graduate Committees. All curriculum committee decisions are forwarded to the Senate Executive Committee.

a) Curriculum Committee Chair \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_ N/A \_\_\_ Approved \_\_\_ NOT Approved

b) Graduate Committee Chair \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_ N/A \_\_\_ Approved \_\_\_ NOT Approved

c) Honors Committee Chair \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_ N/A \_\_\_ Approved \_\_\_ NOT Approved

5) Faculty Senate President \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_ Approved by the Senate Executive Committee

\_\_\_ Approved by the Senate \_\_\_ NOT Approved (Return to sponsor)

6) Appropriate Dean \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_ Approved \_\_\_ NOT Approved (Return to Faculty Senate President)

7) Provost/VPAA \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_ Approved \_\_\_ NOT Approved (Return to Faculty Senate President)

# REQUEST FORM

## PERMANENT COURSE APPROVAL

Initiated by (print): Becka Morgan Date: 12.10.13

### **ADDING A COURSE**

| Prefix/Number | Descriptive Title                | Cr. Hours |
|---------------|----------------------------------|-----------|
| CS 577        | Open Source Software Development | 4         |

#### **Catalog Description:**

This course is designed to engage students in Open Source Software (OSS) development to promote real world skills in software development. Providing students with resources that enable them to engage in an OSS project gives them the opportunity to gain experience in software development that is recognized by potential employers, thus providing students with an advantage in the job market after graduation.  
*Prerequisite: CS 260 or IS 320*

#### **Course Goals and Objectives:**

Upon completion of this course, the student should be able to:

##### Knowledge –

- Give a definition of FOSS
- Discuss the history of FOSS/HFOSS

##### Comprehension –

- Give examples of HFOSS projects
- Outline the steps to setting up the dev environment in OpenMRS

##### Application

- Set up a working dev environment using groups to problem solve
- Map a generic methodology for joining an H/FOSS
- Make use of FOSS tools

##### Analysis

- Distinguish between an active, stable project and one that is dying
- Compare FOSS to Closed source

##### Evaluation

- Take what they learn from OpenMRS and design a simple FOSS project

##### Evaluation

- Critique H/FOSS as a software development paradigm
- write a research paper evaluating an OSS topic

#### **Justification for adding the course (e.g. alignment with other institutions, program revision, etc.):**

OSS development experience is increasingly desirable to prospective employers because it allows them to see examples of code written by applicants. Participation in OSS development also demonstrates the ability to work on a diverse and often non-located team while contributing to a large code base developed by a number of programmers. This model reflects the real world industry and will give WOU graduates an advantage in the job market over students not afforded this opportunity.

#### **Briefly describe other WOU faculty/programs consulted (attach additional sheet(s) if necessary).**

Faculty in the Computer Science Division has been consulted. This is a CS major course, no outside faculty or programs are affected by the addition of this course.

#### **Faculty and Facilities Needed:**

No extra faculty or facilities are needed.

**Attach brief course outline.**

# CS577: Open Source Software

## Syllabus

**CREDIT** 4 credits

**INSTRUCTOR** Becka Morgan  
ITC302C  
morganb@wou.edu  
<http://www.wou.edu/~morganb>

**OFFICE HOURS**

**CLASS TIME**

**TEXTBOOK** None

## DESCRIPTION

This course is designed to provide a framework to facilitate engagement in an open source project. The goal of this class is to get students actively engaged and to provide the foundation for continued success within the open source community. Students will strive not to always know the answer, but instead bring interesting questions. *Required: CS260 or IS320.*

## GRADING

Grading for this course will be based on attendance/participation and two exams.

The following grading scale and distribution will be used.

|           |            |           |           |           |    |
|-----------|------------|-----------|-----------|-----------|----|
|           | 100% - 92% | A         | 91% - 90% | A-        |    |
| 89% - 88% | B+         | 87% - 82% | B         | 81% - 80% | B- |
| 79% - 78% | C+         | 77% - 72% | C         | 71% - 70% | C- |
| 69% - 68% | D+         | 67% - 62% | D         | 61% - 60% | D- |
|           | 59% - 0%   | F         |           |           |    |

30% Attendance/Team Participation  
30% Blog posts  
40% Assignments/Reading preparedness

## **Learning Outcomes**

Students should be able to demonstrate skill in the following:

- Knowledge -
  - Give a definition of FOSS
  - Discuss the history of FOSS/HFOSS
- Comprehension -
  - Give examples of HFOSS projects
  - Outline the steps to setting up the dev environment in OpenMRS
- Application
  - Set up a working dev environment using groups to problem solve
  - Map a generic methodology for joining an H/ FOSS
  - Make use of FOSS tools
- Analysis
  - Distinguish between an active, stable project and one that is dying
  - Compare FOSS to Closed source
- Evaluation
  - Take what they learn from OpenMRS and design a simple FOSS project
- Evaluation
  - Critique H/ FOSS as a software development paradigm
  - write a research paper evaluating an OSS topic

## **Blog posts**

Every week students will blog about their experience with the weeks subject matter.

## **Teams and IRC Meetings**

Team members will be required to meet for a minimum of 30 minutes per week remotely via IRC.

## **Homework & Reading**

There will be regular homework and reading assignments. I expect students to come to class with their work done and ready to learn.

## **Presentation Topics**

All graduate students will be given a topic to research and present to the class. Topics will be determined during week one.

## **Attendance**

Attendance is a required component of this course.

## **Notes**

- It is the policy of the Computer Science department that you must receive a passing grade on the final exam (60% or higher) in order to pass the class.

- A student who is participating in an official college activity, for example a member of an athletic team or a member of a performing arts organization, may have an exception made to a deadline with a signed, written request from the sponsoring organization before the deadline. For example, a student on an athletic team may miss a quiz because of a game provided he or she submits a written request, signed by a coach, before the quiz would normally be given in class. It is the student's responsibility to obtain or arrange for (i.e. via email directly from the coach) the written request.

- Student work that has not been claimed will be recycled at the end of finals week during the current term.

- Please save any graded papers until after you receive your grades from the WOU Registrar. In the event of a grade discrepancy, your copy of a graded paper is your only proof of the grade you received.

- An incomplete grade will be given only in unusual circumstances. You must be passing the class at the time of the request for an incomplete, and there must be a serious event that prevents you from completing the class.

- At the end of the term when all grades are in, you will not receive a letter grade lower than your percentage deserves according to the grade distribution above. However, I reserve the right to assign a letter grade higher than is warranted by calculated percentage.

- If any students have difficulty hearing the lecture or seeing the projection screen please speak up or see me after class. I would appreciate notification of any interpreters or special assistants present in the class so as to make suitable accommodations to my lectures. Students with disabilities, whether or not registered with the Office of Disability Services, are not required to make a disclosure of their condition; however, if you are having difficulties in lecture or in reading the textbook because of a disability I would appreciate being notified. I will maintain full confidentiality. I wish for the instruction and evaluation of students to be fair in all manners possible.

Students with documented disabilities who may need accommodations, who have any emergency medical information the instructor should be aware of or who need special arrangements in the event of evacuation should make an appointment with the instructor as early as possible and no later than the first week of the term. Class materials will be made available in accessible format upon request. It is the student's responsibility to initiate this contact.