

CS499 - OPEN SOURCE SOFTWARE DEVELOPMENT

Lecture #00: Basics

Dr. Igor Steinmacher

e-mail: Igor.Steinmacher@nau.edu

Twitter: @igorsteinmacher



Introductions

- Igor Steinmacher, PhD
 - Assistant Professor
 - Interested in behavior in Software Development
 - Mainly Open Source
 - This course
 - Real world practice
 - Real world problems

Let me know what you know

- Check the most appropriate:
 - A. I have never heard about Open Source
 - B. I know what Open Source is, but just in theory
 - C. I know what it is and I use it.
 - D. I use and have contributed to Open Source
 - E. I use and am a long-term contributor of Open Source



Let me know what you know

- With a few words, tell me:
 - What defines open source?



Let me know what you know

- With a few words, tell me:
 - What do you expect from this course?



This Course: What to Expect

- Work!
 - First half:
 - SEVERAL assignments
 - Short tests (biweekly)
 - Readings + presentation (biweekly)
 - Second half: one multi-part assignment
- Learning Open Source
 - Philosophy
 - Tools
 - Development Process
 - Practice in a controlled environment, probably.
- Guest lectures: diverse perspectives, stories, know-how

Basics

- Open source
 - License
 - Community
 - Freedom
 - Knowledge for all

Basic Course Info module

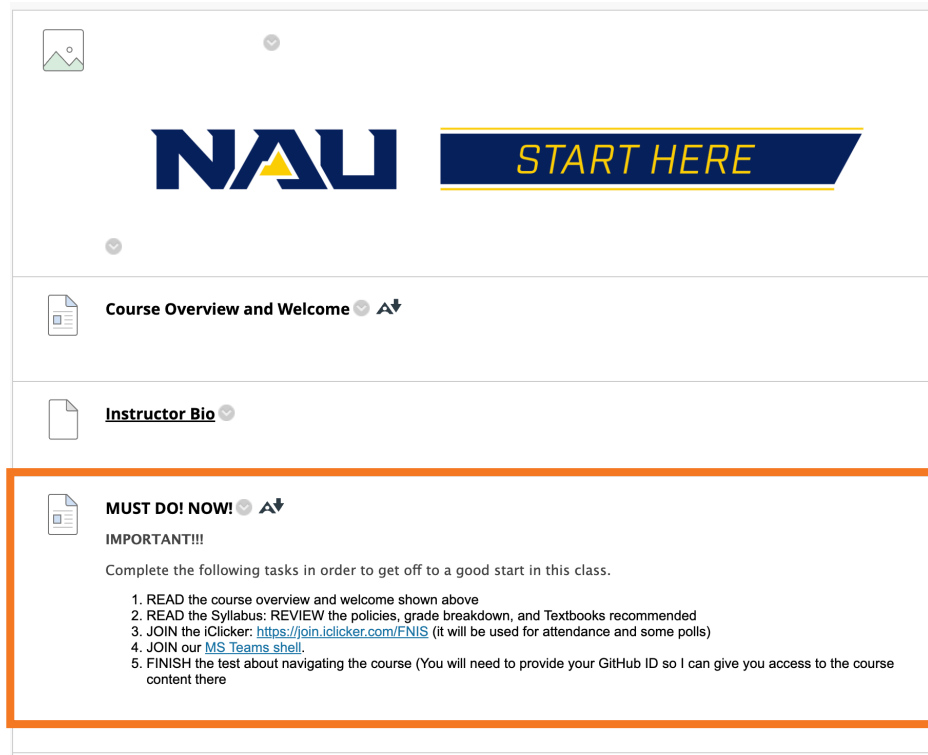
Read ALL the information in that page

Join **MS Teams** (if you haven't yet)

Join **iClicker** (if you haven't yet)

Read the **Syllabus** thoroughly!

Take the **Course Navigation Quiz**



NAU *START HERE*

Course Overview and Welcome

Instructor Bio

MUST DO! NOW! IMPORTANT!!!

Complete the following tasks in order to get off to a good start in this class.

1. READ the course overview and welcome shown above
2. READ the Syllabus: REVIEW the policies, grade breakdown, and Textbooks recommended
3. JOIN the iClicker: <https://join.iclicker.com/FNIS> (it will be used for attendance and some polls)
4. JOIN our [MS Teams shell](#).
5. FINISH the test about navigating the course (You will need to provide your GitHub ID so I can give you access to the course content there)

Course Navigation Quiz



You cannot access GitHub, BBLearn assignments or take any exams if you don't score 100% on this quiz!



You will be required to upload a certificate of completion of you **Academic Integrity @NAU for students course**

Academic Integrity @NAU for Students

← Miscellaneous

Non-Credit ▾

Current Courses →

☰

🔍

Search your courses

Filter

All Courses ▾

25 ▾

items per page

321165.ZERO-CREDIT

Academic Integrity @NAU for Faculty

Original Course View

[Multiple Instructors](#) | More info ▾

☆

321166.ZERO-CREDIT

Academic Integrity @NAU for Students

Original Course View

[Multiple Instructors](#) | More info ▾

☆

171281.ZERO-CREDIT

Faculty Senate

Original Course View

[Multiple Instructors](#) | More info ▾

☆

163351.ZERO-CREDIT

NAU CERT Program: Conduct, Ethics, Reporting and Transparency

Original Course View

[Private](#) | More info ▾

☆

347470.ZERO-CREDIT

New Faculty Orientation

Original Course View

[Multiple Instructors](#) | More info ▾

☆

?

Academic Integrity @NAU for Students

The screenshot displays the user interface of the 'Academic Integrity @NAU for Students' web application. On the left, a dark sidebar contains a navigation menu with icons and text links: 'Academic Integrity @NAU for Students', 'Home - Start Here', 'Module 1: NAU's Academic Integrity Policy', 'Module 2: Integrity in College and Beyond', 'Module 3: Types of Violations', 'Module 4: Consequences for Violating NAU's Integrity Policy', 'Module 5: Preventing Violations', 'Course Index', 'My Grades', 'Final Assessment', 'Certificate of Completion', and 'Help'. The main content area features a header with the 'ACADEMIC INTEGRITY @NAU FOR STUDENTS' logo and a geometric pattern of orange and yellow triangles. Below the header, the text 'Home - Start Here' is displayed. The main content area is divided into three sections: 1. 'Welcome to the Academic Integrity Tutorial! A' with a document icon, containing a welcome message, a paragraph about the new policy, a link to the 'Getting Started Guide', and a note about automatic enrollment. 2. 'Optional: Quick Poll A' with a poll icon, containing a link to answer two quick opinion questions. 3. 'Getting Started Guide for Students A' with a document icon and a 'GETTING STARTED' graphic. The URL at the bottom of the browser window is 'https://blearn.nau.edu/webapps/blackboard/content/launchLink.do?course_id=1&toc_j...'. The browser's address bar also shows 'Private' and 'The Design Team'.

Academic Integrity @NAU for Students Home - Start Here

ACADEMIC INTEGRITY @NAU FOR STUDENTS

Home - Start Here

Welcome to the Academic Integrity Tutorial! A

Welcome students!

We are pleased to offer this online workshop for you to use in learning more about NAU's new Academic Integrity Policy. The revisions will improve fairness and equity for students across all of NAU's programs, colleges, and campuses. The new process allows multiple opportunities for students to self-advocate and ask questions, and it limits the scope of appeals so that cases can be resolved quickly. The policy also closes loopholes for students who commit repeated violations, and improves university-wide processes for streamlining, recording, and communicating when suspected violations occur.

Please open the [Getting Started Guide](#) below to learn more about the requirements for earning your Certificate of Completion and how to successfully use this online workshop.

NOTE: All students enrolled in all NAU's campuses, colleges, and programs have been automatically enrolled in Academic Integrity @NAU for Students. All NAU faculty have also been enrolled Academic Integrity @NAU for Faculty. As a result, some graduate students may have been enrolled in both the student and faculty-facing versions. There is no institutional requirement to complete these workshops, but some instructors may require you to earn a Certificate of Completion as an assignment for their course.

Thanks!

The Design Team

Optional: Quick Poll A

Click on the link above to answer two quick opinion questions about Academic Integrity and see how other students have responded.

Getting Started Guide for Students A

GETTING STARTED

Private

https://blearn.nau.edu/webapps/blackboard/content/launchLink.do?course_id=1&toc_j...

Communication

- **MS Teams channels (public)**
 - Quick questions
- **MS Teams private message (private)**
 - Quick questions
 - Call request during office hours
- **Email (private)**
 - Appointment request
 - Action needed
 - Igor.Steinmacher@nau.edu
- **Office hours**
 - In-person, SICCS building, rm 205
 - MS Teams, link on BBLearn

Communication



Go to the TA first

- To ask questions about the subject discussed in class;
- To ask questions about assignments;
- To get assistance with tool installation;
- To review content for exams;
- Other...



Go to the instructor first

- To ask questions about the grading system;
- To request a grade review;
- To discuss integrity issues;
- To request an excuse for a justified absence;
- You found errors in the course materials;
- Other...

Communication



During office hours

No appointment is required!

First-come, first-serve

In-person or MS Teams

Be effective, more people may be waiting for their turn

Have your materials ready



Outside office hours

No walk-in

Appointments can be requested by email preferably

Use MS Teams for all that is worth it!

Communication

Common interests should be discussed in class and/or in MS Teams (public channel), so that everyone can participate



Avoid groups for office hours

If you are interested in small groups review and/or instruction, please schedule with your TA

During office hours, I will handle one student at a time, so that I can give personalized attention to the issues at hand

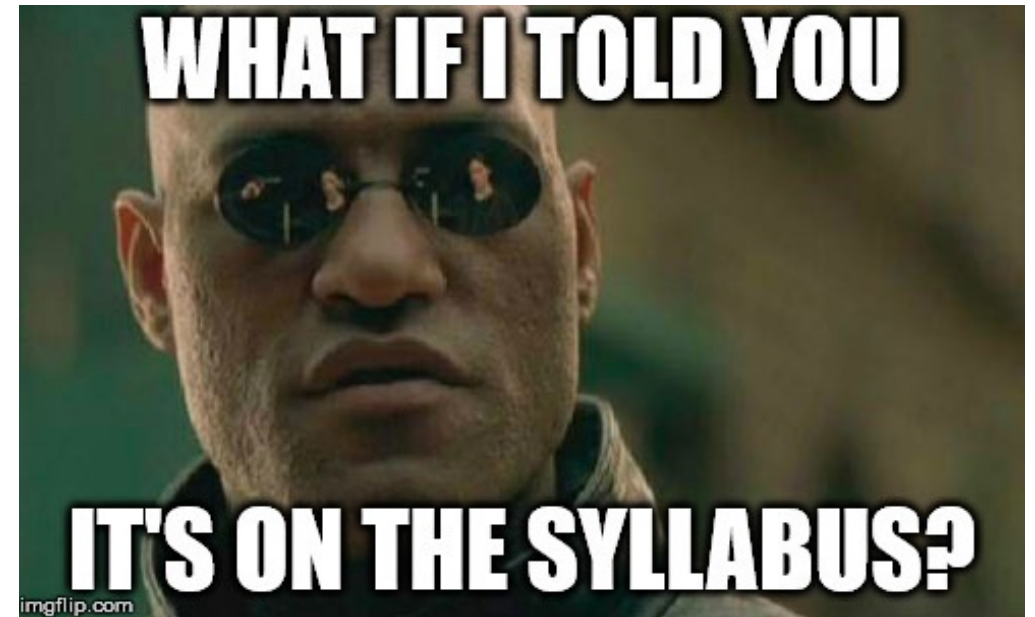
Be aware!

“After class” is not my office hours

- Ask your questions during class time (including attendance issues)
- If your questions are not answered in class, please come to office hours or use asynchronous communication!

Avoid questions that you already have the answer!

- Before asking something to instructors and TAs, **READ THE SYLLABUS**
- Focus on **LEARNING**, not on chasing a grade
 - Grades are built throughout the course.



In-class participation

1

Talk to me

- Raise your hand and wait your turn to talk
- It is expected and **appreciated**.

2

Ask questions

- It doesn't show a weakness
- It helps everyone to grow!

3

Answer questions

4

Correct some mistakes I will eventually make

- Yeah, this happens

HW start the day they are assigned...

... not the day they are due!

I will not answer questions at night

I will not answer questions on weekends

I cannot help you 2 hours before the deadline

I cannot help you after you submitted the wrong file/answer

What you should not ask

Round ups

Report iClicker
issues past class
time

Excuse absences
after 48 hours of
class

Excuse absences
without a
justifiable reason

Excuse absence
for being late

Turn in
assignments
after the
deadline

Get late
assignments
graded

Grade review
past 1 week of
posted grades

Get assignments
with wrong
extension graded

Get assignments
submitted in the
wrong place
graded

Get opportunities
that your
classmates don't
have

Turn a blind eye
to integrity
violation

Drop the course
past the
Registrar's
deadline

Use your
background as an
excuse

**If you are
not sure,
check the
syllabus!**

Do not be late



... for classes

You will be marked absent after 15 minutes of class



... for meetings

I will consider the appointment canceled after 5 minutes of the scheduled time



... for exams

Door closes exactly at the exam time, and you will not be allowed to take the test



... with your assignment

Late work will not be accepted

There is no makeup work for missed assignments

Attendance

I will not fix attendance for you past class time

- I trust you! I believe in you! I am still not going to fix it

You start losing grades if you have 3 unexcused absences

You fail the course if you have 11 unexcused absences

Read the syllabus for when and how to request an excuse

Clicking attendance when you are not in class falls into the Fraud/Fabrication category for Academic Integrity

Attendance

3 unexcused absences – 5% penalty in your final grade

5 unexcused absences – 15% penalty in your final grade

7 unexcused absences – 25% penalty in your final grade

9 unexcused absences – 35% penalty in your final grade (probably Fail)

10 unexcused absences – Fail

Administrative drop (first week)

If you just stop attending class at some point, you will **not** be withdrawn from the course automatically

If you fail to click attendance repeatedly in the first couple weeks

If you fail to show up on time

If you fail to interact with the course materials on BBLearn

If you fail to connect to MS Teams channel

Academic Integrity Violation

NAU takes it seriously, so do I

You may get away with it for some time, but not forever

You would be surprised by how easily we can spot it

Both cheaters and facilitators are penalized

Important

Where to find me:

- MS Teams (Check our BBLearn/GitHub page)
- Room 090-205 (check the Office Hours or schedule an appointment)
- **Igor.Steinmacher@nau.edu**

Office Hours:

- TuTh 08:30 – 09:30 AM

Assignments

Assignment	Planned Deliverable	Weight
Cathedral and Bazaar	Document via BBLearn	4%
Git/GitHub basics	Exercises with outputs on GitHub + BBLearn	4%
Code Review	Two-piece-assignment: Code + Review (4% each)	8%
Create your OSS project	On GitHub: your project	4%
Domain Analysis of projects	Two-piece-assignment: Checklist (2%) + Analysis (6%)	8%
ASSIGNMENT TOTAL		28%
SHORT TESTS	3 Pen/paper tests covering 2 weeks of course	9%
MIDTERM	Larger test covering the first part of the course	8%
Presentations	Read 1 paper every 2 weeks (first part of the course). Submit presentation (1/2 groups/day)	9%
TOTAL PART 1 (INCLUDES ASSIGNMENTS)		60%
Extras	Next Slide	6%

The Extras! (Maximum of 6 points)

- Essays (2 points) → In addition to the ones read for the presentations
 - A 1-page essay summarizing papers made available
 - Maximum 1 per student
- Participation in Talks (2 points)
 - Invited talks at SICCS: attend and write a ½ page essay
 - Maximum 2 per student
- Contribution to Wikipedia (2 points)
 - “relevant” contribution (no typo fixing, or update of 2-3 lines)
 - Maximum of 1 per student

Assignments

Assignment	Planned Deliverable	Weight
Contribution to Open Source	Decision about project and tasks	5%
Contribution to Open Source (Checkpoint 1)	<ul style="list-style-type: none">* Present the task details/progress report* First impressions/guidelines availability* Architectural analysis (document)	10%
Contribution to Open Source (Checkpoint 2)	Progress report presentation	5%
Contribution to Open Source [code Review] (Part of Checkpoint 2)	Code review performed by other group	5%
Contribution to Open Source (Checkpoint 3)	Final presentation (group + instructor) can be done during office hours Report: Summary of the contribution process (I recommend to be written on-the-fly to avoid forgetting things)	10%

Navigating our resources

- BBLearn
- GitHub
- MSTeams