

AE 640A: Autonomous Navigation

General Instructions and Regulations for Assignments

PREAMBLE

All assignments that students will submit as part of this course are subject to the instructions and regulations specified in this document.

Assignments specifications may impose *additional* instructions and/or regulations, and/or *override* any of the following instructions or regulations; all such cases will be explicitly mentioned in the relevant assignment specifications. In cases where an assignment specification contains instructions or regulations which conflict with those listed in this document, the instructions or regulations contained in the assignment specification shall have precedence.

Failure to follow these instructions will result in a large penalty on the assignment.

LATE SUBMISSION POLICY

Unless otherwise specified, a lateness penalty of 10% per day late rounded up (including weekends and holidays) will be applied to all late submissions, up to a maximum of three full days past the assignment deadline, after which submissions for the assignment will not be accepted. This means that if your assignment is late by 5 hours, it will count as a 10% deduction.

The 10% deduction is applied after the assignment is graded normally and is computed by subtraction. This means that if your grade would have been 70% of 100% and you hand the assignment in 1 day late, your grade will be 60% of 100%.

SUBMISSION PROCEDURE

All assignment submissions must be sent to the graders via the appropriate submission box on [Canvas](#).

A typical assignment would comprise of theoretical questions and coding based questions. All the files need to be submitted together as a zipped file. Each coding based question should be stored in its individual directory. This will assure the grading process is more streamlined.

Assignment submitted via means other than through Canvas will not be graded unless you have made prior arrangements with the instructor.

COMPILATION ERRORS

- Students who submit source code files for a given question which contain compilation errors will get at most 25% of the value of that question. In other words, if, for a question that is worth 20 marks, you submit a program which does not compile, your grade for that question will be at most 5 marks.
- In addition to this, if we provide special test files to you to allow testing of your program. Your program must at least *run* with the test files/programs.

In each of the above cases, it is not required that your program work perfectly either by itself or with the test programs, but if your program can not even be run with them, then it means you have not tested your program enough.

GENERAL SUBMISSION GUIDELINES

Each student **must** submit.

- For answers to theory-based questions, it is recommended to use L^AT_EX for typesetting. NO handwritten solutions shall be accepted.
 - Each problem should be attempted on a new sheet. For each problem, your name, Roll No., the problem number, the date and the names of any students with whom you collaborated should be mentioned.
 - Your goal is to communicate. Full marks will be given only to correct solutions which are described clearly. Convoluted and unclear descriptions will receive low marks.
- For each question that requires writing and/or modifying a program, the file(s) containing the source code of your program and/or your modifications (that is, files in the `src` directory of your ROS Workspace) must be submitted in the folder with the question name (example: `question_2`).
- Unless otherwise specified, you should not submit the executable files generated by compiling your program (that is, files in `devel` and `build` directories).
- For full marks, all your programs should conform as closely as possible to the programming standards specified [here](#) and [here](#). If you have a good reason for violating these, you should add this in your code as a comment.
 - In case of questions requiring you to write your own code, ensure that a `README.md` file is present which briefly describes your algorithm, instructions to compile your code and any dependencies that need to be installed.
 - For writing ROS packages, the sample template to be followed is available [here](#). It is recommended that the same code organization is used throughout the course.
- It is important to cite relevant sources (wherever possible) you have referred to for your assignment. These include papers, books, code repositories and people from whom you have sought assistance.

You should not submit any files other than those required by the specification of each assignment.

ILLEGAL COLLABORATION AND USE OF SOURCE CODE

Assignments must be done INDIVIDUALLY; you must not code in groups, and you must not copy any student's submission or any part thereof. Further, you must not allow another student to copy your submission or any part thereof. You are free of course to discuss ideas with each other on how to approach a problem, but you should be very careful not to write code together. Generally, if your friend is typing on your computer, this has crossed the line.

In addition, unless otherwise stated, all source code you submit must have been written ENTIRELY by you; you must not submit source code which has been written in whole or in part by any other party, even if this source code is in the public domain or you have permission from its author to use and/or modify it in your work (obviously, this prohibition does not apply to source code supplied by instructors explicitly for

this purpose).

Performing any of the preceding actions constitutes illegal collaboration and/or use of source code, which is a serious violation of these instructions and regulations and will not be tolerated. If you have any doubt over what you are doing constitutes illegal collaboration you should either contact the course staff to check, or add a citation in your code's README file. In this case, you may not get full credit for the assignment, but you will definitely not get in any trouble.

Graders will randomly check submissions for suspicious similarities. Additionally, instructors will use automated software similarity detection tools to compare each submission to every other submission. However, note that these tools will be used solely to determine which submissions should be manually compared for similarity; instructors will NOT accuse anyone of illegal collaboration based solely on the output of these tools. Finally, instructors can request at any time that you explain the workings of any source code you submit for an assignment.

Students caught collaborating illegally and/or using source code they did not write themselves illegally on any assignment question will be formally accused of academic fraud and their cases will be referred to the appropriate university officials for disciplinary action.

IDENTIFICATION

You should identify yourself clearly in every file you submit. Your identification information should include:

- your name
- your IIT-K ID

This information should appear on the very first line of any source code file that you hand in. If a question uses multiple source files, you should put it at the top of each file

RESTRICTIONS

Every program you submit must compile and run using the ROS Kinetic distribution. In addition, you must not use any third-party libraries unless the assignment specification explicitly allows the use of such libraries.

When provided source code, you must NOT change any part which you have not been explicitly permitted to change by the assignment specification.