

# Programming 3 Advanced

Introduction, Organization, Rules and Regulations, GitHub Labs

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# Outline

- 1 Organization
- 2 Resources
- 3 Rules & Regulations
- 4 Schedule
- 5 GitHub Lab System



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Course page P3Z

<https://pages.mini.pw.edu.pl/~hermant/zajecia/programowanie-3>

Course page P3A

<https://pages.mini.pw.edu.pl/~hermant/courses/programming-3>



### Lab teachers (P3Z)

- M.Sc. Tomasz Herman
- M.Sc. Cezary Bella
  - Adam Grącikowski
- M.Sc. Anna Kozłowska
  - B.Sc. Piotr Krasowski
- M.Sc. Maciej Spychała
- Piotr Skibiński

### Lab teachers (P3A)

- M.Sc. Cezary Bella
  - Adam Grącikowski
- M.Sc. Anna Kozłowska
- M.Sc. Maciej Spychała



## Books

- C# 12 in a Nutshell: The Definitive Reference 1st Edition by Joseph Albahari
- C# 12 Pocket Reference: Instant Help for C# 12 Programmers 1st Edition by Joseph Albahari, Ben Albahari
- The C# Player's Guide 5th Edition by RB Whitaker

## Documentation

- C# Documentation  
<https://docs.microsoft.com/en-us/dotnet/csharp/>
- .NET Documentation  
<https://docs.microsoft.com/en-us/dotnet/>
- C# Language Reference  
<https://docs.microsoft.com/en-us/dotnet/csharp/language-reference/>



Full texts of rules and regulations are available on USOS

## PL course page

```
https://usosweb.usos.pw.edu.pl/kontroler.php?_action=
katalog2/przedmioty/pokazPrzedmiot&prz_kod=
1120-IN000-ISP-0234&lang=pl
```

## EN course page

```
https://usosweb.usos.pw.edu.pl/kontroler.php?_action=katalog2/
przedmioty/pokazPrzedmiot&kod=1120-IN000-ISA-0236&lang=en
```



# Rules & Regulations

## Class attendance

- Attendance at lectures is not mandatory
- Attendance at laboratory classes is mandatory
- In case of absence, a student receives 0 points for activities conducted during the missed laboratory
- An absence is considered excused upon presenting a medical leave to the course tutor
- A maximum of 3 absences from laboratory classes is allowed



### Laboratory activities (100p. total)

- 8 Workshops (4p. each)
- 6 Laboratory Tasks (8p. each)
- 1 Laboratory Task Retake
- 2 Projects (10p. each)

### Common Rules

- The code quality is also evaluated
- To earn points, solutions must be submitted to the server using the git version control system
- Solutions will be compared using an anti-plagiarism system





# Rules & Regulations

## Laboratories - Workshops

- Students can earn 0 to 4 points per workshop
- Each workshop duration is 90 minutes during classes
- Workshops can be completed at home within 1 week of receiving the workshop
- Students who earned fewer than 2 points during the class can earn up to twice their score after completing it at home
- An excused absence allows the student to complete the workshop at home within a week for full points



# Rules & Regulations

## Laboratories - Tasks

- Students can earn 0 to 8 points per laboratory task
- Each laboratory task duration is 90 minutes during classes
- The entire solution must be created independently
- Laboratory tasks are divided into stages. Points for each stage are specified in the task description. Stages must be completed in the designated order.
- Each stage is checked and graded during classes
- An excused absence allows solving the laboratory task at home, with conversion points awarded at the end of the semester
- Students can earn 0 to 8 points for improving a laboratory task, replacing the score of the indicated task



# Rules & Regulations

## Laboratories - Task Retake

- Students can earn 0 to 8 points for improving a laboratory task, replacing the score of the indicated task



# Rules & Regulations

## Laboratories - Projects

- Students can earn 0 to 10 points per project
- Each project has a 2-week completion period from the time of assignment
- Solutions must be completed at home and submitted to the server using the git version control system
- Upon the instructor's request, students may be asked to present their submitted solutions during classes
- The entire solution must be created independently



### Acceptable aids

- your own materials
- system documentation
- the Internet (provided that the work evaluated is self-constructed)
  - Any publicly available code fragments used must not constitute a significant portion of the solution and must be clearly marked with references to their source
  - Materials sourced from the Internet must be understandable to the student, and the student should be able to explain the operation of the copied code

### Prohibited

AI-generated solutions, such as chat GPT, Github Copilot, and similar tools are prohibited

# Rules & Regulations

## Grading

- Part A (40 p.): W1, W2, W3, W4, L1, L2, L3
- Part B (60 p.): W5, W6, W7, W8, L4, L5, L6, P1, P2

### Necessary conditions for passing

- at least 20 points from Part A
- at least 30 points from Part B
- total of more than 50 points

### Grading scale

- [0, 50] points - 2.0 (fail)
- (50, 60] points - 3.0 (satisfactory)
- (60, 70] points - 3.5 (fairly good)
- (70, 80] points - 4.0 (good)
- (80, 90] points - 4.5 (above good)
- (90, 100] points - 5.0 (very good)



# Schedule

## Part A (40 points)

No.	Lab	Topic	Type
1	03.10.2024	MSBuild, dotnet	Workshop
2	10.10.2024	git, C# Basics	Workshop
3	17.10.2024	Class/Struct, Inheritance, Properties, Access Modifiers	Workshop
4	24.10.2024	Operators, Indexers, Base Class Library	Workshop
5	31.10.2024	Yield, Interface, Generics, IEnumerable	Laboratory Task
6	07.11.2024	Collections, LINQ	Laboratory Task
7	21.11.2024	Extension Methods, Delegates, Lambdas, Events	Laboratory Task



# Schedule

## Part B (60 points)

8	28.11.2024	Unit Tests, Exceptions	Workshop
9	05.12.2024	Assembly, Attribute, Reflection, Embedded Resources	Workshop, Project
10	12.12.2024	IO, Serialization, Disposable, Streams	Laboratory Task
11	19.12.2024	Thread, Task, Async, Await, Parallel	Workshop
12	02.01.2025	Thread, Task, Async, Await, Parallel	Laboratory Task
13	09.01.2025	Interoperability, Marshal, Unsafe	Workshop, Project
14	16.01.2025	Synchronization	Laboratory Task





- Registration is mandatory
- Visit the <https://ghlabs.mini.pw.edu.pl> website
- Link your USOS and Github profile
- Join the WUT-MiNI organization
- Tasks will be published on a GitHub repository
- Solutions must be submitted to a GitHub repository

## System Accessibility

The GitHub Lab System is accessible only from the MiNI network. To access the system from home, you can use an SSH tunnel.

