



Introduction to Robotics

Felipe P. Vista IV



Chonbuk National University

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Global Frontier College

- Class Administrative Matters
- Introduction
- Lecture Proper



Intro To Robotics

CLASS ADMIN MATTERS



Who me?

- Faculty member GFC – School of Int'l. Eng'g. & Science
 - *Network System Control Lab – Electronic Eng'g Dept., JBNU*
- PhD in Electronic Engineering, JBNU
- Worked at Industry & Government of Philippines
 - *Mostly systems using commercial/opensource DBs/DBMSs*
- Research Interests:
 - *Systems Design, Software Development, Fuzzy Logic, Sensor Fusion, Embedded Systems, Navigation systems, Marine Information System, Signal Processing, Augmented Reality, MRI Systems, Drug Discovery.*





Class Information

➤ Class Schedule

➤ *Wed: 12:00 – 13:00; Fri: 11:00 – 13:00*

➤ Textbook

- *Elements of Robotics, Ben-Ari & Mondana, 1st Edition, ISBN-13: 978-3319625324 (Springer)*
- *Springer Handbook of Robotics, Siciliano & Khatib, 2nd Edition, ISBN 978-3-319-32552-1 (Springer)*





Class Information

➤ Mode of Instruction

- *Online lecture via **ZOOM**/ Video upload (**Old IEILMS**)*
- *Wednesday (12:00nn – 01:00pm)*
 - <https://us06web.zoom.us/j/83813255673?pwd=c0RRUWIweG9TdnAxb2o2UzhNdnFyUT09>
 - Meeting ID: 838 1325 5673
 - Passcode: AKQJ10
- *Friday (11:00am – 01:00pm)*
 - <https://us06web.zoom.us/j/86560890397?pwd=WTBiS2pRMTVRUW1vTWRWRkpld010dz09>
 - Meeting ID: 865 6089 0397
 - Passcode: AKQJ10





Class Information

➤ Assignments

- *Given during lecture or posted at [Old IELMS](#)*
- *Submission via [Old IELMS](#)*
- *<https://ieilmsold.jbnu.ac.kr>*

➤ Mid-Terms & Final Exams

- *Online via [Old IELMS](#)*
- *<https://ieilmsold.jbnu.ac.kr>*





Grading

- Midterms : 20%
- Finals : 30%
- Attendance/participation : 20%
- Assignment : 30%





Grading

- Mid Terms (20%) and Finals (30%)
 - *Enough time will be given*
 - *It is ok to discuss with classmates but **submit your own solution!***
 - *Discussing is **ok**, cheating is **"no-no"** → candidate for automatic **"F"***

 - *Late submission = **less points**, maximum **90%-95%** per item/number*
 - In case we have to do tests online
 - *Wrong answer, is **10% = "F"** per item/number*
 - *Submission but no answer is automatic **0% = "F"** per item/number*
 - *Non submission is automatic **0% = "F"** per item/number*



Grading

- Attendance/ Participation (20%)
 - Attendance (5)
 - *more than 15 mins late = absent, and 3 lates = 1 absent*
 - *more than 3 absences = problem (very biiiig)*
 - *Everybody start with 8 points for attendance*
 - Become less if too much absences, ex: 70% of 5 = 3.5 points
 - Participation (15)
 - *answer/raise questions during lecture to get points*
 - *everybody starts with 12 points for participation*
 - If have less than 9 class participation, ex: 70% of 10 = 10.5 points



Grading

- **Assignment (30%)**
 - *It will take some time*
 - *Mostly practical, to help learn*
 - *It is ok to discuss with classmates **but do it yourself!***
 - *Assignments usually **due one week** after posting*

- *Late submission = **less points**, maximum **90%-95%** per item/number*
 - In case we have to do tests online
- *Wrong answer, is **10% = "F"** per item/number*
- *Submission but no answer is automatic **0% = "F"** per item/number*
- *Non submission is automatic **0% = "F"** per item/number*





Sample Grading

➤ Midterms : 20%

Q. 7 /20.00	Q. 8 /5.00	Q. 9 /5.00	Q. 10 /20.00	Q. 11 /5.00	Q. 12 /10.00	Q. 13 /10.00	Overall Score
20	-	0	20	0	10	10	75.00
20	0	5	20	0	10	5	70.00
5	0	0	4	0	5	5	24.00
20	0	5	20	0	10	5	85.00
20	0	-	20	0	0	10	60.00
10	0	0	20	0	0	5	35.00
20	0	5	20	0	10	10	85.00
20	0	5	20	0	10	10	85.00
20	0	-	20	0	10	10	70.00
20	5	-	20	0	0	5	55.00
20	0	5	20	0	10	10	85.00

Mid Terms Result

Raw Score (Pts)	Approximate Equivalent Grade for MidTerms
-	-
70	Co
82.5	Bo
90	Ao
70	Co
70	Co
82.5	Bo
70	Co
75	C+
70	Co
75	C+
75	C+
-	-





Sample Grading

➤ Finals : 30%

Q. 14 / 5.00	Q. 15 / 5.00	Q. 16 / 5.00	Q. 17 / 5.00	Q. 18 / 5.00	Q. 19 / 5.00	Q. 20 / 5.00	Q. 21 / 5.00	Overall Score
-	-	-	-	-	-	-	-	-
5	5	5	5	0	5	0	0	70.00
5	5	5	5	5	5	5	0	82.50
5	5	5	0	5	5	5	5	90.00
5	5	5	5	0	5	5	0	72.50
5	5	5	5	5	5	0	0	65.00
5	5	5	5	5	5	5	0	82.50
5	5	5	0	5	5	5	0	70.00
5	5	5	5	5	5	5	0	75.00
5	5	5	5	0	5	0	0	65.00
5	5	5	5	0	5	5	0	75.00
5	5	5	5	5	5	5	0	75.00
-	-	-	-	-	-	-	-	-

Finals Exam Result (Actual Scores)

Raw Score (Pts)	Approximate Equivalent Grade for Finals Exam
75.00	C+
70.00	C-
24.00	F
85.00	B+
60.00	D-
35.00	F
85.00	B+
85.00	B+
70.00	C-
55.00	F
85.00	B+
-	-





Sample Grading

➤ Attendance

5%

Name (Original Name)	User Email	Join Time	Leave Time	Duration (Minutes)
		4/12/2021 9:12	4/12/2021 10:14	62
		4/12/2021 9:12	4/12/2021 9:14	3
		4/12/2021 9:12	4/12/2021 9:14	3
		4/12/2021 9:12	4/12/2021 9:14	3
		4/12/2021 9:12	4/12/2021 9:14	3
		4/12/2021 9:12	4/12/2021 9:14	3
		4/12/2021 9:13	4/12/2021 9:13	1
		4/12/2021 9:13	4/12/2021 9:14	2
		4/12/2021 9:14	4/12/2021 9:14	1
		4/12/2021 9:14	4/12/2021 9:14	1
		4/12/2021 9:14	4/12/2021 10:14	60

Bad ZOOM User Name (Absent)

- Iphone → Not your name
- SiAko 202100001 → Bad
- SiAko → Name only
- 202100001 → ID Num only

ZOOM User Name (Present)

- University ID Num_Name
- 202100001 SiAko → GOOD (Present)

Name (Original Name)	User Email	Total Duration (Minutes)
		62
		63
		62
		62
		63
		62
		63





Sample Grading

➤ Participation

15%

Wk 08				Wk 14				Total Participation	Important Lect Participation	* Initial Participation Rate V4	Generous	
											Add'l Bonus Pts from Impt Lect Part (0.5/ participation)	Overall Participation Grade V4
4	4	4	4	5	5	6	6					
19	19	21	21	31	31	2	2					
								10	4	100	2	102
						1		7	0	90	0	90
				1		1	1	14	11	100	5.5	105.5
				1				5	1	80	0.5	80.5
						1		11	3	100	1.5	101.5
						1		10	4	100	2	102

Regular Participation Activities:

- Questions/ Comments/ Suggestions
- Write answers in Chat Box
- Minimum 9 for semester = 100

Important Lecture Participation:

- When I ask questions related to current lecture
- Write answer in Chat Box





Sample Grading

➤ Participation 15%

09:41:28 From **iPhone** : Sure

09:39:11 From **MyName 202050000** to Everyone : thank you

11:51:52 From **201960000** to Felipe P. Vista IV(Privately) : 1/2?

11:52:14 From **The Name** : 1?

// **OK, regular question**

09:38:08 From **202012345 Your Name** to Everyone : Lms is better

// **OK, important lecture participation**

11:51:15 From **202098765 Nicki Narimani** : 15?





Sample Grading

➤ Assignment : 30%

ASSIGNMENTS						Overall Score (Raw)	Final Grade V4
ID number	1	2	3	4			
						0.00	0.00
	100	100	100	100		100.00	100.00
		80				20.00	20.00
	100	100	100	100		100.00	100.00
	95					23.75	23.75
						0.00	0.00
			80			20.00	20.00
	97.5	98	80			68.88	68.88
	100	80				45.00	45.00
						0.00	0.00
		100				25.00	25.00



Sample Grading

➤ Final Semestral Grade

Midterms (20%)	Finals (30%)	Attendance/Participation (20%)		Assignment (30%)	Overall Score	Equivalent Score
		Attendance (5%)	Participation (15%)			
72.00	78.75	60.00	80.00	65.00	72.53	Co
83.25	80.33	100.00	102.00	100.00	91.05	Ao
82.50	25.20	80.00	90.00	68.75	62.19	Do
90.00	89.78	100.00	105.50	100.00	95.76	A+
72.50	70.88	90.00	80.50	72.50	74.09	Co
78.75	70.88	90.00	101.50	65.00	76.24	C+
82.50	89.25	90.00	80.00	68.75	80.40	Bo
78.75	89.25	90.00	102.00	85.13	87.86	B+
75.00	73.50	60.00	80.50	77.50	75.38	C+
65.00	70.88	60.00	80.50	65.00	68.84	D+
75.00	89.25	80.00	80.50	73.75	79.98	C+

<i>Grades Equivalent</i>
A+ = 95 - 100
Ao = 90 - 94
B+ = 85 - 89
Bo = 80 - 84
C+ = 75 - 79
Co = 70 - 74
D+ = 65 - 69
Do = 60 - 64
F = < 60





Student Responsibilities

- Download/Install **ZOOM** app for online lecture
 - Zoom profile must be your **OASIS ID+name** similar to OASIS
 - Ex.: **202061234 YourName**
- Regularly login and check **on-line learning system** for updates, notifications
 - <https://ieilmsold.jbnu.ac.kr>
 - Some presentations & lecture videos will be uploaded after class
- Regularly check **Kakao Group Chat** for class updates
 - Everybody must have a Kakao talk account
 - Search & add account "**botjok**", introduce yourself and name of class ("**Robotics**"), then you will be added to the group chat



Thank you.