

ELEC-L321101 Post-Graduate Studies in Micro-
and Nanosciences (Fall 2021)

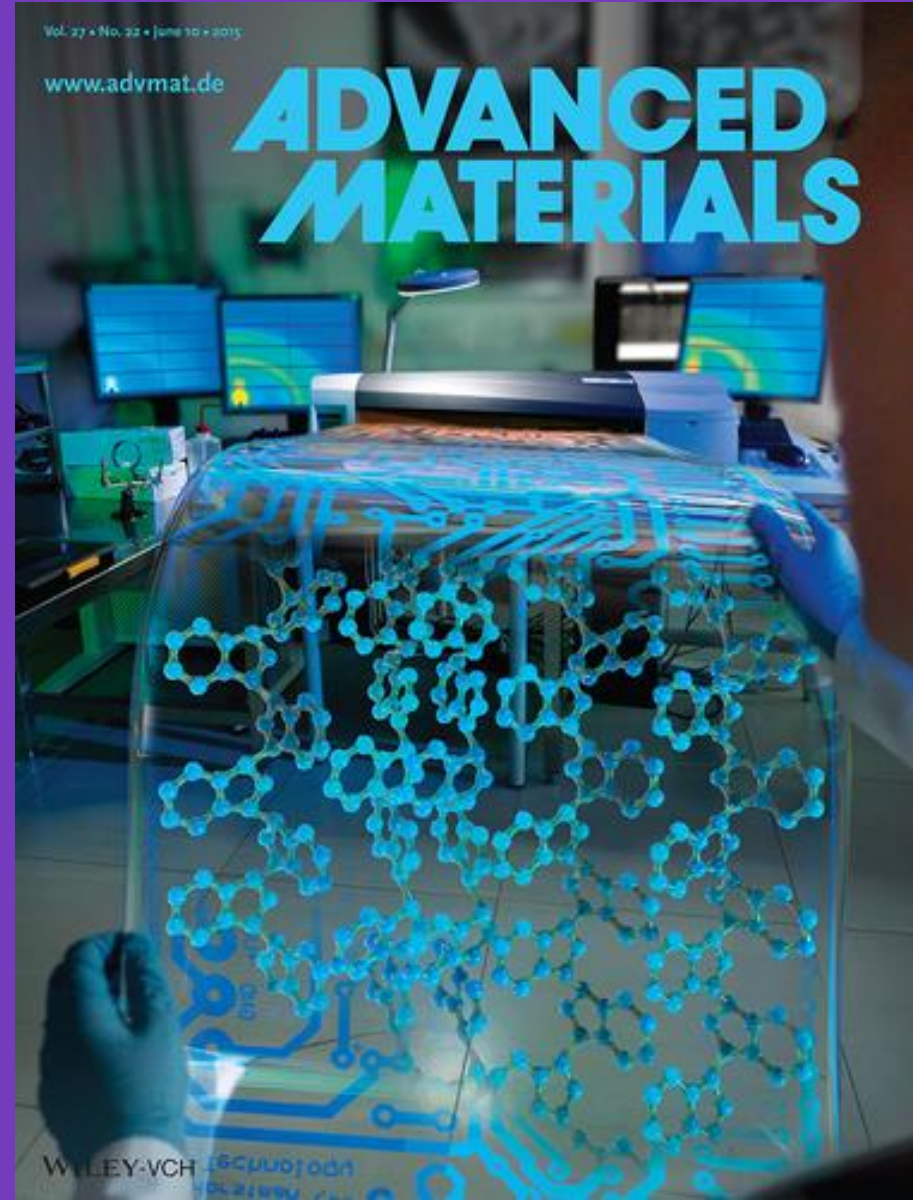
Course Introduction



Aalto University
School of Electrical
Engineering

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<https://organicelectronics.aalto.fi>



(Online) Class Rules

2



Video ON

(if you wish so and if this does not interfere with communication quality)



Mute ON

feel free to interrupt the class anytime for questions and comments



Office Hours

CS will be around after class, email: caterina.soldano@aalto.fi, Micronova & Teams



MTeams folder

Feel free to use Teams folder as our interactive virtual class

ELEC-E321101: Learning Outcomes

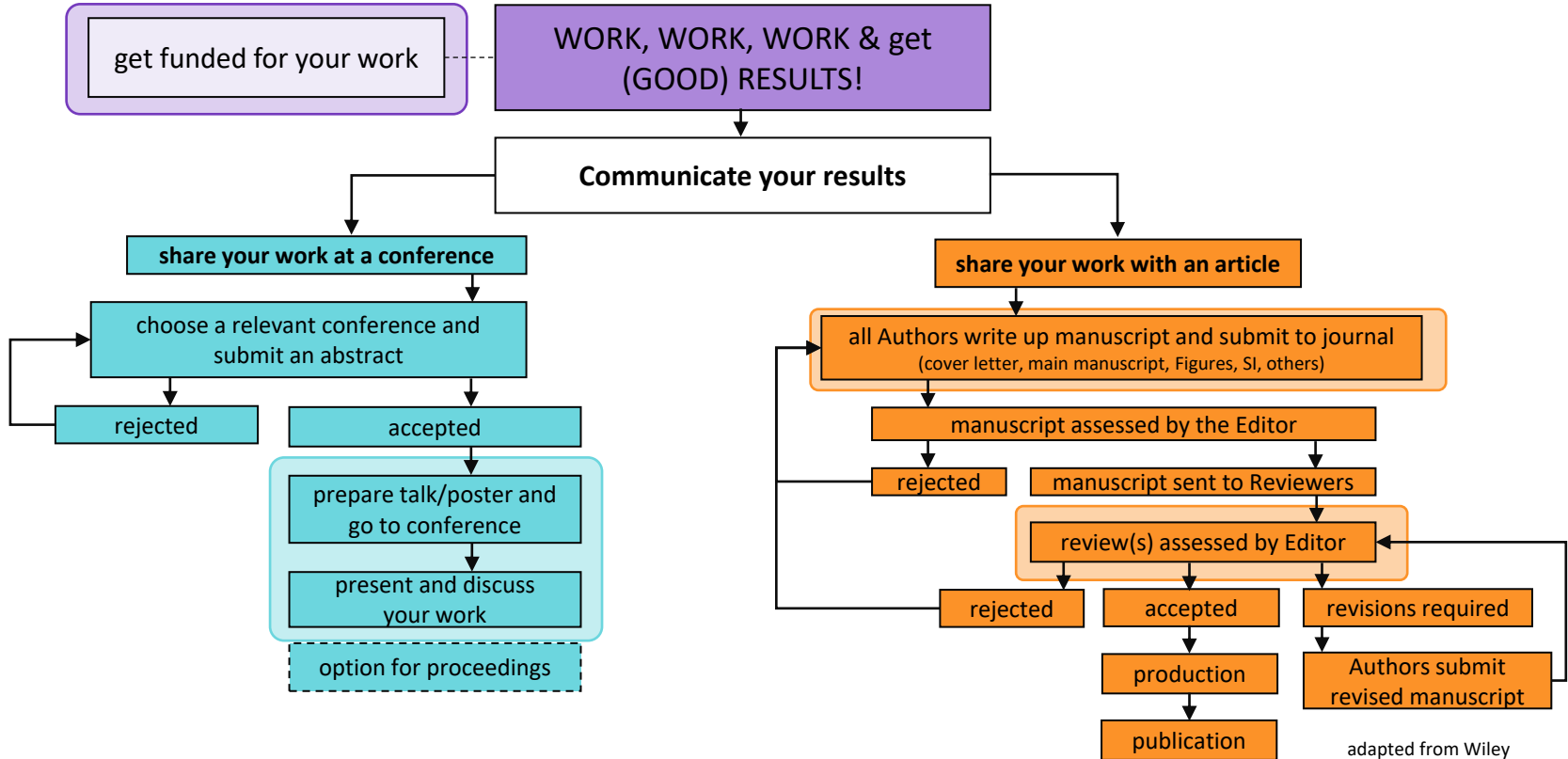
3

By the end of this course:

- You will learn/become familiar with some of *researcher's common practices* and *activities*
- You will be capable of critically reading and understanding a scientific text, extrapolating main ideas, summarizing your readings and presenting your findings.
- You will be capable of delivering and assess clear scientific communication, including your own and your peers.



Researcher Common Activity (CS)



adapted from Wiley

ELEC-E321101: Description of Assignments

5

- **Let's hear about your Thesis Topic (10 points, DL: mid-October, TBD)**

For this assignment, you will be asked to share with all of us what is your research topics. You will have approximately 15 minutes and we are interested in knowing:

- What is the general field of your thesis? What is the context of your research?
- What is the relevant question(s) that you will try to address with your work?
- Which techniques/tools are needed? Which characterization? Why?
- What you expect your contribution to be?

- **Manuscript Reviewing Process (20 points, 15 + 5, DL: 12.11.2021)**

You will act as a Reviewer for a submitted manuscript.

You will be assigned a manuscript to review (in October) in your field of expertise. The assignment consist of:

- Writing the cover letter to be submitted along with this manuscript to one relevant journal in the field (5 points)
- Review the manuscript and submit the report to the Journal Editor (15 points)



ELEC-E321101: Description of Assignments

6

Conference Presentation (20 points, 15 + 5)

SUBMISSION: ABSTRACT + PRESENTATION **DL: h18.00, day of your presentation**

Details: **Talk** (15 minutes) + **Q&A** (5minutes) **at a conference**

If you are planning to attend a conference, this could be a good occasion for you to try your presentation. If not, you can decide to report on something you are currently working on (and that you might plan to present in the future).

Please **share (on MTeams) and submit (MC) 1page (max) abstract summary** of the topic you are going to present (one week before your scheduled presentation).

If none of these two apply to you, you can also choose a relevant paper in your field and present it. In this case, write a 1page(max) abstract summary of the results (different from the actual abstract which might be already in the paper)

Your colleagues will read you submitted abstract summary and will comment on your presentation and ask questions afterwards. A form will be provided. Please name the file Date_Presenter_YourName and submit it to MC.

(Max 5 points, 1 point/presentation-review, at least 5, if possible). DL: Friday of the week of the presentation, h18:00.



ELEC-E321101: Description of Assignments

7

Write your own funding proposal: 50 points (45 + 5)

- **Funding Application Proposal: 45 points (DL: 27.11.2021)**

Foundation “Kat ” will grant 50K for the year 2022 to support doctoral studies. You will need to submit your own research proposal by **27.11.2021 (h18:00 local time)**. All topics are welcome, but preferably the focus should be in the broad field of Micro- and Nanoscience.

Details: 5 pages maximum (reference not included), arial 11, spacing 1.15, figures and tables might be used. Template is available on MC.

Even if you have recently applied for some funding personal, please consider this assignment as an opportunity to become more familiar with writing proposals.

NOTE: You will have the chance to submit a draft of your proposal (**DL: 29.10.2021**) for a feedback from me and your colleagues. Please note that this is optional. The draft can be a collection of ideas, main points to develop, preliminary draft. We can also discuss all together, if needed.

- **Pitch Your Idea: 5 points (DL: last day of class)**

You will have 5 minutes to convince the committee to grant you money. You can use any type of support you think it might be successful (please, let us know if you need some special arrangement for this). All pitches will be presented on the last day of class (December, TBD).



ELEC-E9210: Timeline & Activity DL

8



Information & instructions will be available on MC
All DLs are h18.00 (MyCourses)

ELEC-E321101: Assignments & Grading (10cr)

Assignment		Workload*	Submission DL (ALWAYS h18.00)	points
Pre-Assignment	Survey	-	17.09	(+2)
Conference Presentation	Conference talk	30h	day of your presentation	15
	<i>You as Reviewer</i>	10h	friday after presentation	5
Your Thesis Topic	Present your thesis topic	20h	mid-October	10
Manuscript Reviewing Process	Cover letter	10h	12.11	5
	Manuscript Review	30h		15
Write Your Own Funding Proposal	Application (final)	90h	27.11	45
	Application (draft)	-	29.10 (optional)	-
	Pitch Your Idea	20h	last day of class	5
Total		210h		100 (102)

Final grade:

- <50 = FAIL
- 50-60 = grade 1
- 61-71 = grade 2
- 72-81 = grade 3
- 82-92 = grade 4
- ≥ 93 = grade 5

*Please report how much time you have spent on preparing each assignment. This will help estimating the real workload. Thanks!

Some More Info...

10

- **ELEC-L321101** there is no specific book/slides for this course. Useful resources are shared for specific assignments. Feel free to ask any information/advise (email/MTeams channels)
- **ELEC-L321101** if you encounter any problem when submitting materials or incorrect information on MyCourses or MTeams, please let me know ASAP.
- Presence in not mandatory for this course, but some assignments require presence to the class

small survey
for course
details

