ENPH 459 Engineering Physics Project 1

Lecture 1 – welcome back!

Carl Hansen, Dylan Gunn, Bernhard Zender Friday January 5, 2017

Today

- 1. Meet the team
- 2. Homework
- 3. Evaluation Scheme, Proposals Review, Deliverables, Details
- 4. Schedule, Team Presentations, Speakers
- 5. Win an award! APSC Design & Innovation Day
- 6. Midterm Self-Evaluation Survey
- 7. Equipment, Procedures, Spaces, Purchasing
- 8. Project Lab Tour (~30min, sign up today)
- 9. Regular Meeting Times

Meet The Team

Carl Hansen

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Dylan Gunn

dylangunn@gmail.com



Bernhard Zender

bzender@phas.ubc.ca



Homework

Make a poster about your project as follows:

- double letter size, portrait (11" wide, 17" high)
- title and # of your project, team members and sponsor
- copy info and pictures from your proposal, but go easy on text
- purpose: to inform about what's going on inside the projectlab
- must be submitted as PDF, email Bernhard <u>bzender@phas.ubc.ca</u>

The easiest way to do this super quick is Google Slides. You can custom-set the format of The One Slide That Is To Be Your Poster to 11" wide, 17" tall, drag and drop images/screenshots/graphs and add text as needed. When done, you download it as PDF and email that to Bernhard. No link sharing please.





Evaluation Scheme

Project Proposal	15 %
Final Class Presentation	15 %
Professionalism (Project Milestones, Weekly Reports, Logbook, Surveys)	25 %
Final Recommendation "Report"	45 %

First Term – Proposals (15%)

Purpose of a proposal:

- To lay out a timeframe and schedule
- To identify needed resources
- To identify potential risks
- To demonstrate competence and gain permission to perform the work

Deliverables

Your project will change over time. Focus on what is important.

- You have very limited time and resources. Focus on what is most important and do it well.
- Be absolute clear on what is the most useful final outcome is for your Project Sponsor.
- Be realistic in setting timelines and deliverables.
- Work towards objective, quantitative outcomes.

Professionalism (15%)

Log Books

- 1 per person, supplied by team members
- Electronic only submit as PDF at the end of term
- Course guidelines in syllabus.

Weekly Reports

- Use UBC Connect.
- Due by <u>Mon 5pm</u> every week.
- Done by Editorial Manager

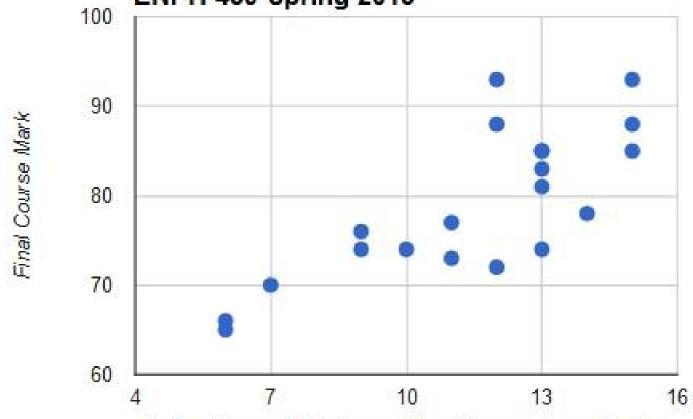
Milestone Reporting

- Use UBC Connect
- Submit by 11pm on Milestone Date
- Avoid changes less than <u>one week</u> before proposed Milestone Date.

Surveys

Similar to the 253 end-of-term survey, may be done multiple times

of entries on UBC Connect (weekly reports + milestones) vs. (Final Mark) ENPH 459 Spring 2013



of entries on UBC Connect (weekly reports + milestone reports)

2nd Term Schedule

- Mix of team pitches/presentations and guest speakers.
- Course webpage will be updated throughout the term: https://projectlab.engphys.ubc.ca/enph459-fall2017/

Week#	2018 – Term 2	Topic	Notes
1	Fri Jan 5	Info Session / Course Overview	slides link coming soon
2	Fri Jan 12	No class, but official Projectlab intro tours - mandatory	Sign Up Here
3	Fri Jan 19	Carl Hansen	
4	Fri Jan 26	Student Team Presentations	
5	Fri Feb 2	Student Team Presentations	
6	Fri Feb 9	Student Team Presentations	
7	Fri Feb 16	Dylan Gunn	

In-Class Presentations

- Each group will present two times during the term.
- Goals for these presentations: [Dylan]

Final Class Presentation (15%)

• Done in last two classes, or *maybe* just in the last one.

UBC Design & Innovation Day on April 5th

- showcase your project
- win an award (\$\$)
- two different types of awards: one by us (engphys) and one by APSC
- more info soon, here:
 https://apsc.ubc.ca/event/2018/design-and-innovation-day

Midterm Self-Evaluations

- similar to what you did towards the end of ENPH 253
- more detailed look at team inner workings, organization, and effectiveness
- self-reflection, spot problems early, don't wait for them to solve themselves - please talk to us
- interaction with your sponsor is evaluated as well

Midterm - Dates?

Expenses / Equipment

- Confirm with Project Sponsors about sources of funding (~\$200 from Project Lab).
- 2. Project Lab can make purchases for your team.
 - Email all purchase requests (documentation, vendors) to Bernhard
 - use .ca websites like digikey.ca if they exist.
 - Canada based companies ship cheaper, and don't get stuck in customs
 - super cheap suppliers from Asia can take 2 or 3 months to come in
- 3. Avoid using your own money (reimbursements are slow).
- 4. Track usage:
 - Project Lab items used as part of your project.
 - Items purchased by the Project Lab for your group.
 - Stock material from PHAS stores / other places
 - Reviewed by Project Lab during term, submitted and reviewed by Sponsors and Lab at end of term

Amenities, Facilities and Current Developments

- waterjet is offline until further notice
- laser cutter and 3D printers alive and well
- both can be used for personal projects, but personal
 3D prints cost \$\$ (project related ones are free)
- Hebb is being renovated:
 - laser cutter access via ChemPhys main entrance
 - we are moving ENPH253 to the old SUB, upstairs

Amenities, Facilities and Current Developments

Hennings 115 (Project Lab)

- Dedicated space/resources for each project
- ENPH 479 students are currently wrapping up, will finish over the next few weeks.

Student Machine Shop

 Access for 40hr students only. Bring a buddy. Never work alone in the shop.

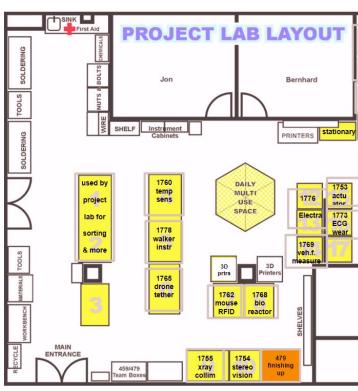
At any time

 email your student # to Bernhard for card access to Hennings and the Projectlab.

Next Friday

Deadline for your mini-posters: email Bernhard your PDF as described

- Projectlab (Henn115) tours, no class.
 Sign up <u>here</u>.
- Make a team decision about asking for Projectlab work space - email Bernhard for that
- link to see the lab layout



You are encouraged to set up Weekly Meetings with Us

- Groups may request to meet weekly with the Project Lab outside of the lecture times.
- Let us know times you are available.
- Typically ~1/3 of groups will set up regular meetings for 459.

Safety

- Never hesitate to call 911
- First-aid from Fire Station often faster! 822-4444
- Avoid working alone on anything with any safety risk
- Always inform Project Lab / Sponsor of potential risks.

Don't Forget (Mandatory) - Next Friday - Projectlab Tour (sign up here)