PURE Presentation Workshop

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Goals For Your PURE Presentation

Things to mention in your talk:

1. What the problem is and why it is important
2. What your role in solving the problem is
3. How have you progressed
4. What skills and knowledge you have learned during your time in PURE

Don’t forget to thank and acknowledge your mentors/group!

Have fun!
Be Clear and Concise!

Presentation

• Speak up!
• Pace is important
• Don’t use technical jargon
• Do not memorize a script
• Do not read off slides

Slides

• Neat layout
• Legible fonts
• Just enough text
• Clear figures/plots
• Limited animation
Have a Neat Layout

• Do not use a complicated background
• Make sure figures and textboxes are aligned and spaced well
• Slides should not be too cramped or too empty
• We must be able to read everything on your slide
• Don’t forget to put name and page number on each slide
The PURE Research Program is an interdisciplinary program in the College of Engineering pairing freshman and sophomore undergraduates with research mentors. The general goal of the program is to encourage underclassmen to explore research at an early stage in their academic career.

The program pairs up 1-2 undergraduate students with a graduate student or professor mentor. Each pair will decide on a project to work on throughout the semester. All undergraduate mentees will write a 1-2 page summary and give a presentation at the end of each semester on what they have done/learned. Mentors benefit since PURE is flexible with their schedules, providing them undergraduate researchers with the desired skill set and inspirations who make great early additions to a research team. The structure of PURE, including events such as the Research Presentations Workshop, also trains mentees about the discipline of engineering research.
Good Example

P.U.R.E.  
Promoting Undergraduate Research in Engineering

- Freshmen/Sophomore level mentee
- Graduate student mentor
- Encourage underclassmen to explore research
- Mentees learn new skill sets not taught in classrooms
- Mentees will present research in symposium

Assign students → Research → Present

Courtesy ECE Illinois

A. Liao
Legible Fonts

- Sans serif fonts project well (Calibri, Arial, etc)
- Serif fonts do not (Times New Roman or any “typewriter” fonts)
- Use the same font/size throughout your presentation
- Avoid too much color (black on white or vice versa is easiest to see)
- Color can be used to emphasize points (but again use sparingly)
- Can the person in the back of the room read your text?
- PPT users should use Microsoft Equation (under insert → object) to insert equations

\[ p(x) = p_0 \left( C_1 + \frac{C_2 x}{L} \right) \]
Just Enough Text

• Do not write paragraphs of text
• Keep statements short and succinct
• Text should enhance or explain some figure/plot on the slide
• NEVER have a slide with just text
• Check suhpellling
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Clear Figures/Plots

- Make sure the smallest details are visible
- Avoid colors that are hard to see (yellow, pink, gray)
- PowerPoint can be used to draw figures (explore!)
- Axes on plots should be large enough to read
- If figure/plot is not your own you must cite it!
- Make sure you lock aspect ratio when resizing

if choice == 5
    if helper == 1
        help=helpdlg('First click on the center of the peak and then click twice to pick the FWHM! [help]');
        uiwait(help)
    end
    [xcenter,ycenter]=ginput(1);
    [xfwhm,yfwhm]=ginput(2);
    icenter=1;
    while xcenter<=data(icenter,1)
        icenter=icenter+1;
    end
    ifwhml=1;
    while min(xfwhm)<=data(ifwhml,1)
        ifwhml=ifwhml+1;
    end
    ifwhmu=1;
    while max(xfwhm)<=data(ifwhmu,1)
        ifwhmu=ifwhmu+1;
    end
    x0=data(icenter,1);
    y0=data(icenter,2);
    fwhm=abs(data(ifwhmu,1)-data(ifwhml,1));
    gauss=fwhm./(2.*sqrt(2.*log(2)));
    lorentz=fwhm./2;
    xfit=linspace(data(length(data),1),data(1,1),1000);
    ifit=(y0.*exp(-(xfit-x0).^2)./(2.*gauss.^2));
    ff=
ifit=@(C,xdata)(C(1).*C(2).*exp(-(xdata-C(3)).^2)./(2.*(C(4).^2))+((1-C(1)).*(C(2)./((1+(((xdata-C(3))./C(5)).^2)).^2))));
C=lsqcurvefit(ffit,[1 y0 x0 gauss lorentz],data(:,1),data(:,2));
pfit=(C(1).*C(2).*exp(-(xfit-C(3)).^2)./(2.*(C(4).^2)))+((1-C(1)).*(C(2)./((1+(((xfit-C(3))./C(5)).^2)).^2)));
figure(2)
plot(data(:,1),data(:,2))
xlabel('Raman Shift (cm^{-1})')
ylabel('counts')
hold all
plot(xfit,pfit)
end
Limited Animation

• Do not animate unnecessarily

• Animations are also ok to help break down complicated scenarios

• Animations best used to highlight portions of slides

• Embedded movies must point to the correct directory