1. **Introductions**
   1. Instructor introductions to include our roles in this session and our backgrounds
   2. Student introductions (verbal), educational and experience backgrounds, and their course expectations and interests for Instructor information.
2. **Schedule**
   1. When Lecture Sections are expected to occur (but are subject to change)
   2. When the Laboratory exercise is expected to occur (but is subject to change)
   3. When homework problems are expected to be assigned (again subject to change)
3. **Locations of Materials**
   1. The central repository of our information is located in the USPAS website for this class  
      <https://uspas.fnal.gov/materials/22onlineTAMU/Accelerator-Power-Electronics.shtml>  
      This web page has four folders, General Information, Video Lectures, Lecture Slides, and Computer Lab.
      1. The PowerPoint master file of all the lecture notes is in the Lecture Slides folder. The homework problems (no solutions) are in Section 15 of the lecture notes master file. The PowerPoint source file is “2022USPASAcceleratorPowerElectronics.xlsx”. There also is a PDF version of this file, “2022USPASAcceleratorPowerElectronics.pdf”.
      2. Notes concerning LTspiceVII and the computer laboratory for this class are in the Computer Lab folder.
      3. All of our lectures will be recorded on Zoom. These recordings will be archived in the Video Lectures folder
      4. The Class schedule is in the General Information folder and the file name is “USPAS Power Electronics Class Schedule.xlsx”
   2. We have a Google Drive for you to use to submit your homework. Using the email addresses that you have given to USPAS, we will authorize you to write to and read from one folder on this Google Drive. (Note that the Google Drive may require you to have an email account that Google can recognize and authenticate. If the account you used for USPAS registration is not recognized, you may need to sign up for a Google account.) Go to Google Drive, then click the “Shared with me” menu and upload your homework problems solutions for grading into the folder labeled with your name.
   3. USPAS has created a Zoom account for all classroom lectures. The Zoom information, which you should have received in a separate communication from USPAS, copied here for convenience, is  
      <https://msu.zoom.us/j/99274947160>  
      Meeting ID: 992 7494 7160  
      Passcode: 338652

We will also create breakout rooms to be used for the homework study sessions to create an effective environment for communication among students and between students and the instructors.

* 1. We have created a Slack workspace, TAMU22 Accelerator Power Electronics Engineering, and two Channels, lecture and homework, within that workspace. These channels are intended for general communication between the students and instructors. The homework channel is intended to just concentrate on the homework. The lecture channel is for everything else -- questions about the lectures as well as general announcements. Using the email address that you gave to USPAS, we will add all of you as Multi-Channel Guests with access to these two channels. Slack will generate and send to you an email with the information required to access these channels. (You may need to have a Slack account to access these channels. These accounts should be available for free from Slack.) Go to SLACK.com and enter your email address. SLAC will send a verification code to that email address. Enter the code and then SLACK will ask you to “sign in as a guest”. At the guest sign in page enter your email address again and the password you used to setup your Slack account when you received the invitation to join.

1. **Homework**
   1. Homework problem solution submittals are due by 8AM PST on the dates that the instructors set for each problem. Problem solutions should be in pdf or jpg format (pdf preferred) and the file labeling should consist of
   2. ProblemAA,Lastname,Firstname,2022-XX-YY.ZZZ where AA is the problem number, XX is the month, YY is the day, and ZZZ is the file type (pdf or jpg). An example is “Problem05,Bellomo,Paul,2021-01-27.pdf”
   3. There are 21 homework problems and a laboratory exercise. Each homework problem carries equal weight towards a final grade. The laboratory exercise might carry several times the weight of a homework problem, but the exact weighting has yet to be determined.
   4. Homework 0 is something to be completed early on the first day of the class. Its main purpose will be to ensure that all of our unique (to us) remote teaching links are active and accessible by everyone. For Homework 0 you will
      1. Submit to your assigned Google Drive homework folder a paragraph that gives your educational and experience backgrounds, your expectations for the course, and any particular subjects you would like covered in the course. The second paragraph of your submission will be the installation status of LTspiceVII on your local computer.
      2. Submit a message to the lecture channel of the Slack workspace.
      3. Submit a message to the homework channel of the Slack workspace.
2. **Computer Laboratory**
   1. We will devote one class to a circuit simulation laboratory using the software LTspiceVII. This is a proprietary version of the SPICE software. This version was first created by Linear Technology Corporation (LT) and freely distributed so that users could model circuits made with LT chips. Analog Devices acquired LT and continues to maintain and distribute LTspiceVII.
   2. We ask that, before the first class session, you download the 60 MB current version of LTspiceVII from  
      <https://www.analog.com/en/design-center/design-tools-and-calculators/ltspice-simulator.html>  
      and install it on a local machine that you can use during the class. Instructions for the download and installation are in the Computer Lab folder of our class. Also in that folder are lib and sym directories that we will use in the classroom laboratory.
   3. If someone is unable to install and run LTspiceVII on a local machine, we will work to make it available for remote use from Amazon Web Services. USPAS may have already sent you information about creating an account on AWS for this purpose. If you can load LTspiceVII on your local machine, you will not need AWS and will not need to create an account on it.