

NOTE: Use non-engineering format for questions 1 & 2. Also, follow the instruction for turning in the Project Journal and Design Video.

1. Please complete the required end of course surveys:
 - a. **Course Outcomes Assessment** – survey will be emailed to you through dehall@latech.edu via survey monkey with the subject line similar to ENGR 122 Course Survey].
 - i. Your input is very important to us as we work to improve the first-year engineering experience here at Louisiana Tech. We appreciate you taking the time to provide feedback that is as accurate as possible.
 - b. **Course Evaluation** – emailed through evaluations@latech.edu. You will need to fill this out for each course you are taking this quarter.
 - c. **Engineering Student Status Survey** - <https://goo.gl/forms/GC0tA6VWB1DOr7xQ2>
2. Please complete the survey below and turn it in with your homework.

ENGR 122 Student Survey – Multi-disciplinary Teams

One of the goals of ENGR 120-122 is to provide instruction and opportunities for students to function on multi-disciplinary teams. You have worked together all year long on various projects (pump fabrication, pump testing, conductivity sensor, RTD project, fishtank project, servo project, smart product). Some of these projects have been with two-person teams, and some have been with teams of up to four people. By this point, you've probably been on teams that functioned very well, and on some teams that didn't function as well.

In most cases, you have picked up on how to work as a team by actually working as a team. In ENGR 122, we presented the Ten Faces of Innovation to help you learn to appreciate the benefits and strengths of people who are different from you. To assess the overall effectiveness of your experience on teams and on the instruction that we provided to you on teams, please complete survey below. You are invited to submit this anonymously or include your name, as you desire. Your candid evaluation is very important.

SURVEY IS ON THE NEXT PAGE (so you can turn it in separately).

As they relate to functioning effectively on multi-disciplinary teams, rate each of the statements below as follows:
 1—strongly disagree 2—generally disagree 3—no opinion 4—generally agree 5—strongly agree

Collaboration and Conflict Management	
Team Development 1. I can apply basic principles of team development and interpersonal dynamics.	1 2 3 4 5
Interpersonal Style 2. I recognize and can capitalize on individual difference in style and perspective.	1 2 3 4 5
Conflict Management 3. I can apply principles of problem-based conflict management.	1 2 3 4 5
Participation 4. I understand and am willing to be fully involved in team efforts.	1 2 3 4 5
Team Communication	
Active Listening 5. I can convey understanding and use listening skills to move a conversation forward.	1 2 3 4 5
Feedback 6. I can give and receive constructive criticism.	1 2 3 4 5
Influencing Others 7. I can persuade others through well-reasoned use of facts and clear conveyance of ideas.	1 2 3 4 5
Sharing Information 8. I can provide and review information in a timely manner.	1 2 3 4 5
Team Decision Making	
Defining a Problem 9. As a member of a team I can help identify and articulate the problem to be solved.	1 2 3 4 5
Innovation and Idea Generation 11. As a member of a team I can help generate creative and viable solutions.	1 2 3 4 5
Judgment and Using Facts 12. As a member of a team I can help research conclusions based upon clear analysis of facts and ideas.	1 2 3 4 5
Reaching Consensus 13. As a member of a team I can help ensure buy-in and commitment to decisions reached.	1 2 3 4 5
14. Please share any additional comments, observations or recommendations related to your instruction and experience of functioning on multi-disciplinary teams.	

3. Prepare for the final exam by working in class problems, homework problems, and practice problems found on the Schedules and Downloads page under classes 10 and 20. Also, remember to look on the Schedules and Downloads page to confirm the time and place of your exam!
4. Prepare for the Freshman Design Expo. Check the downloads page for date, time, and location of the event.
5. **Design Journal: Due Class 19**

NOTE: Please email your design journal to your professor. One design journal is required per team, preferably in Microsoft Word or Adobe Acrobat format. In the syllabus, the design project accounted for 20% of your grade. Your design journal will count as 1/3 of your project grade and will allow your instructor to have input to your grade.

Please complete an electronic design journal to document the development of your "product." We don't expect you to spend much time developing the design journal, since you should have all of the content for the journal already. Please include the following components in the journal in the order below:

1. Title Page: Project name, team members, ENGR 122 course section, instructor, date
2. Final project description from problem 7 of homework 12
3. Problems 4 and 6 from homework 8 (for the memo make sure you use proper memo formatting, including signatures)
4. Problems 2 – 9 from homework 9.
5. Problems 5 and 6 from homework 10
6. Problem 6 from homework 11
7. Problem 8 from homework 12
8. Problem 6 from homework 13
9. Include pictures of your final product and from your final presentation to the judges. This could include pictures of your prototype, a PowerPoint presentation of your work, or the things you printed out for your display at the Expo.

Please put titles and brief descriptions where appropriate. For example, when presenting prototype three, you might say that "Prototype three is shown below. This prototype advanced prototype two by adding an ultrasonic sensor and sheet metal brackets for the servos . . ."

6. **Design Video: Due Class 19**

Student teams are required to develop a video documenting their product and experience. There are a number of free video editing software editing packages. One member of your design team will need to open a YouTube account and post your video to the web. Please follow the guidelines below when entering your video into YouTube.

Video Title: Include project name, teacher's last name, and the quarter. For the 2017-18 academic year, the "quarter" listed will be either Fall 2017, Winter 2018 or Spring 2018. Use the exact spacing and characters shown here so your instructor can locate your video. example: Remote Controlled Dog - Hall - Spring 2018

Video Description: Describe your video, and mention that the video was created at Louisiana Tech. example: This video details a project completed in ENGR 122 at Louisiana Tech University as part of the Living with the Lab first-year engineering course sequence. The product demonstrated here is the "remote controlled dog" which utilizes a GPS sensor, an RF transmitter, an RF receiver, and vibrating motors to direct the dog.

Category: Please select "science and technology"

Privacy: Please select "share this video with the world." Remember, only team members who are comfortable with an image of them being on YouTube should be visible in the video.

After your video has been posted on YouTube, please email the link for your video to your instructor for grading.

Required video content:

- The length of video should be between 2 and 5 minutes.
- Include the course number (HNRS 122 or ENGR 122), the location (Louisiana Tech), the term (Fall, Winter, Spring), and the year.
- Describe the problem you are trying to solve (re-enact the problem?).
- Show how the product solves the problem (show product demo).
- Provide a technical description of your product (show and discuss sensors, etc.).
- Briefly discuss the disciplines that the project required (biomedical, chemical, civil, cyber, electrical, industrial, mechanical, nanosystems, chemistry, biology, . . .).

Some suggestions:

- We encourage a creative approach.
- At least one student should speak in the video - it needs to be personal.
- You are not required to identify yourself.
- The videos will be posted to YouTube, so keep this in mind when deciding whether or not you want to be on the video; also remember that you are representing LA Tech.
- Music must conform to YouTube license agreements (music copyright).
- Show design alternatives.

7. All borrowed parts must be returned to Bogard Hall 222. Your professor will provide you with the parts return schedule for your class' section.