Spring 2022 Antenna Final Project

Project

周次	Lecture	Labs
11	**DRA**	DRA array
12	Happy Holidays	Project Assignment
13	**Emerging Antenna Technologies**	~~Antenna Meas.~~ Progress Pre. (5-10 min)
14	**Wave Propagation**	~~Antenna Meas.~~ Progress Pre. (5-10 min)
15	Final Pre.	Final Pre. (15 min)
16	**Review and QA**	Happy Holiday

Project Topics

- 8 projects posted on line by May 6 (Friday) for you to choose from

- Topics relate to antenna design

- Involve at least one microwave simulation tool or one mathematical modeling tool such as CST, HFSS, ADS or matlab

- May require analyze and reproduce an antenna structure results from a recent publication in IEEE xplorer http://ieeexplore.ieee.org/, TAP or AWPL

- May require improvement of the design

Project Presentations

- Progress presentation
  - once for each student during Week 13-14
  - 5-10 minutes for each group
  - Include development update and answers to the feedback
  - *Use the provided PPT template.

Project Presentations

- Final presentation
  - Total of 15 minutes for each group.
  - 10 minutes of presentation
  - 5 minutes of Q&A
  - **Week 15**
  - *Use the provided PPT template.

Final Project Submission Package

1. A project report using the provided (.docx template)
   - describe what you have done and your results.

2. Project presentation PPT

3. Modeling Tutorial (算例)
   - HFSS files
   - PPT
   - Word document
   - Modeling Tutorial Video 3-5 min

- Due: **June 3 (Week 16)**

Why Project?

Existing Research on **Project**-Based Learning

The research consistently showed that students taught through **PBL** displayed: enhanced student performance. increased student motivation and engagement. improved teacher/student interaction.

Study Confirms Project-Based Learning Has a Positive Impact ...

Why Project?

- Project based learning (learn-by-doing)
- Learn through Feedback
- Collaboration skill
- Self-learning skill
- Data collecting skill
- Analytical skill
- Research skills
- …