

LEGO II -- FIRST LEGO League Jr. Team (ID: 2441)

The Course Introductions:

The course ID 2441 “FIRST LEGO League Jr. Team” is a guided team work presentation course. It encourages students to use learned knowledge and skills to create solutions for the projects.

FIRST LEGO League Jr. is one of K-12 programs for kids and is designed to introduce STEM concepts to kids ages 6 to 10 while exciting them through a brand they know and love – LEGO®.

Guided by adult coaches and FIRST LEGO League Jr. Core Values, students build models using LEGO® Education WeDo 2.0 and create Show Me posters to present what they learned. The program focuses on building interest in science, technology, engineering, and math (STEM) through a real-world challenge – to be solved by research, critical thinking, and imagination.

The Course form and goals:

1. Our course will be formed by two teams. Each team will have up to six team members. The total is up to 12 students. The course minimum seat is 6 students. Age is 8-10.
2. All students will be directed by one teacher and one TA for each team.
3. The course will use guide book from FLL Jr. and follow FIRST core values. The teacher will lead the students to finish required projects and prepare for Expo. Amount the core values, team work effort is the key of this course. Students will have experiences for FIRST LEGO League.

The pre-requirements for students:

1. Age: 8-10
2. Knowledge level: The student had taken course 2421 or get teacher approval
3. Device: iPad with LEGO WeDo 2.0 installed (free download from iTunes Store)
4. Optional: Encourage students to own a set of LEGO WeDo 2.0 or LEGO EV3 by yourself at home.

LEGO II -- FIRST LEGO League Jr. 团队 (ID: 2441)

课程介绍

该课以团队竞赛为主线,鼓励学生用已经学到的知识和技能去创建自己特有的答案.

“FIRST LEGO League Jr.”是个专为 K-12 年级 (6-10 岁) 设置的项目. 让学生们了解 STEM(科学,技术,工程,数学)的基本概念,通过 LEGO 这个深受孩子们喜爱的著名品牌玩具来激励孩子们对学习的热情.

依照 FIRST 组织的核心价值观,按照规定的教材要求,由成人教练的指导.学生们使用 LEGO WeDo 2.0 创建模型解决要求的课题. 并且使用海报板的形式展示解决课题的具体步骤和思路.课程设计主要集中在让学生们通过研究判断和想象来完成现实世界挑战性课题, 以此对 STEM (科学,技术,工程,数学)产生兴趣.

上课方式和目的

1. 该课由两个队组成. 每队最多六人. 全班不超过 12 名学生, 最少 6 名学生. 建议入学年龄 8-10 岁.
2. 所有学生由一名老师授课, 每队配备一名助教.
3. 教材使用 FLL Jr. 的统一课本. 教师将指导学生们完成规定的课题项目并为参展做准备. 在 FIRST 核心价值理念中团队合作是最为重要的. 通过学习, 为学生加入 FFL 比赛积累经验.

选课要求:

1. 年龄: 8-10 岁.
2. 程度: 选过 LEGO I (ID: 2421) 或者经任课老师容许
3. 上课用品: iPad, 安装了 LEGO WeDo 2.0 (免费从苹果网站下载)
4. 可选: 鼓励学生自购 LEGO WeDo 2.0 或者 LEGO EV3 于家中使用.

The Differences between two courses (2421 vs. 2441):

Course	ID2421 Beginning LEGO Robotics	ID2441 FLL Jr. Team
Curriculum	One-year course uses LEGO Education WeDo 2.0	One-year course uses LEGO Education WeDo 2.0 + FLL Jr. Team Guide
Goals	Knowledge learning based hand-on. Problem solving and coding	Team work based hand-on. Designing and project presentation
Expo	No	Yes
Age	7-8	8-10

两门课 2421 和 2441 之间的主要区别:

课名	ID:2421 Beginning LEGO Robotics	ID:2441 FLL Jr. Team
课程	课程为期一年(可只上一学期); 使用 LEGO Education WeDo 2.0	课程为期一年(建议上两学期);使用 LEGO Education WeDo 2.0 + FLL Jr. Team Guide
目标	通过搭建模型, 解决问题和电脑编程来学习科学知识和技能	团队共同设计,搭建模型, 解决现实科学问题并参加展示比赛.
参展	无	有
适合年龄	7-8 岁	8-10 岁