

Course Title	Course Code	Number of Study Hours			Year	Level	Prerequisites
		Theoretical	Laboratory	Credit			
Research Project	491PHYS	--	--	2	4 <sup>th</sup>	7 <sup>th</sup>	Department agreement

**(1) Brief Course Description**

The undergraduate research project may take a number of different forms. It might involve carrying out a small experimental investigation, involving the use of laboratory facilities and underpinned by a review of previous work in the same theme. The project could be a computational programming work, consisting of a small numerical simulation of special physics phenomena. In this case the attention should focus on the computational technique and its effectiveness of describing the phenomena. The project could even consist on a detailed literature review in a particular subject, but it would need to be critical and theoretical in its approach, and involve much more research than a long essay.

**(2) Course Objectives**

**This course is designed to provide students with:**

- A research work experience supervised by a faculty member
- The possibility to expand his knowledge in a specific area
- A strengthening of his scientific skills
- A strengthening of his writing skills
- The possibility to present and defend his project in front of an audience.

**(3) Course Contents**

- Literature review
- Analysis and discussion of the problem
- New approaches to the problem (Theoretical or Experimental)
- Application of the approaches
- Results analysis and discussion
- Writing the dissertation
- Preparation of the defending presentation

**(4) Assessment Criteria**

Supervisor: 50%

Referees: 50%

**(5) Course Teaching Strategies**

- Lectures, Paper Assignments, Homeworks, and Web-based Assignments

**(6) Text Book:**

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**(7) Reference Books:**

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**Approved by:**

**Head of Physics Department**

Dr. Hussain Alathlawi

