# Title
Angular Momentum in Sports

## Content/ Subject areas
Physics, science, sports and Informatics

## Target group:

<table>
<thead>
<tr>
<th>Target group:</th>
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<tbody>
<tr>
<td>1. Age range: 17-18 years</td>
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<td>2. Size of the group: 6 groups of 5-6 students</td>
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<td>3. Level: medium</td>
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## Learning objectives / competences
The objective is to understand the behavior of physical quantity "angular momentum", as well as the realization of a power point representation and the ability to expose clearly to an audience of students.

## Description of overall activity
This work is proposed with the aim of learning the central theme, i.e. physics of angular momentum, and at the same time:
- stimulating group work and collaboration,
- implementing electronic devices and familiarizing themselves with Microsoft Office packages, very useful for writing a document, as well as making a presentation that can be exchanged, compared and reused by future classes.

## Description of the process and teaching/ learning strategies used
The students have to prepare a power point representation in which they describe the main features of the physical quantity "angular momentum", then analyze the law of conservation of angular momentum. In particular, they must focus their attention on the action of this quantity in sports, as in martial arts, diving, skating...

## Evaluation/ types of assessment
Considering implementation of a power point representation, ability to understand physical laws and creativity.

## Materials and tools
The book, internet resource and a personal computer with a projector.

## Timing and learning environment
10 days to prepare the presentation and 20 minutes to expose it.

## Conclusion
(Innovation what makes it good practice, further application)
The proposed work has aroused the interest of the students in the experimental world, stimulating creativity in the search for applications of greatness considered in the sport world. They also had to work together and interact with those classmates who usually do not have any kind of relationship. They also had to learn to use Excel and PowerPoint programs, Microsoft Office packages, which for some students were totally unknown.

## Contacts
http://www.istituitoimmacolata.it/