## ACM 40890 Group Projects

#### Guidelines:

- 10 students registered for the module for credit
- Students divided into three groups (4, 3, 3).
- All groups work on the same three assignments:
  - Droplet Impact
  - Wave Tank
  - o LES
- Assignments are described in the project handbook on the <u>module webpage</u>,
  this is to be the main resource for students as they complete the assignments.
- Each group may work as a unit to perform the experiments and the numerical simulations. Data may be shared between group members.
- However, <u>individual reports</u> will be submitted at the end of the module; each student to complete an individual report on each of the assignments, hence three individual reports per student.
- Each group must as a unit produce a five-minute video report on their preferred one of the three assignments.

#### Marking Scheme:

The projects count for 50% of the grade in the module. This will be made up of:

- 40% individual projects (individual grades)
- 10% video report (all individuals in the group get the same grade)

Letter grades to be awarded as per the <u>UCD Module Grade Descriptors</u>.

#### Due Dates:

All assignments due back on Friday 28<sup>th</sup> April. Hardcopy submission of written assignments, video – or link to video – submitted by email

## Groups:

Stokes <sup>1</sup>	Orr <sup>2</sup>	Reynolds <sup>3</sup>	

# Access to equipment and module timetable:

	Stokes	Orr	Reynolds	All Groups
Midterm 1	Demo	Demo	Demo	
	Wed 12/03	Wed 12/03	Wed 12/03 <b>1pm</b>	
	12pm	1pm		
Midterm 2	WT Mon / Tues	Х	WT Thurs / Fri	
Week 8	WT Mon / Tues	High-Speed	WT Thurs / Fri	1-hour lecture
		Camera		(Wed 26/03)
Week 9	High Spood	WT	X	Midtorm Citting 1
VVEEK 9	High-Speed Camera	VVI	^	Midterm Sitting 1 (Wed 02/04, 1pm)
	Carriera			(Wed 02/04, 1pm)
Week 10			High-Speed	Midterm Sitting 2
			Camera	(Wed 09/04, 1pm)
Week 11				Drop-in Session
				2pm-3pm
				(Wed 16/04)
Week 12				Drop-in Session
				2pm-3pm
				(Wed 23/04)

High-Speed camera can be checked out from the School Office (check School Office hours in advance).

### Demonstrations:

• Wednesday Midterm 1 12pm: Stokes

• Wednesday Midterm 1pm: Orr and Reynolds

<sup>&</sup>lt;sup>1</sup> George Gabriel Stokes, 13 August 1819 – 1 February 1903, born Skreen, Co. Sligo

<sup>&</sup>lt;sup>2</sup> William McFadden Orr, 2 May 1866 – 14 August 1934, born Comber, Co. Down

<sup>&</sup>lt;sup>3</sup> Osborne Reynolds, 23 August 1842 – 21 February 1912, born Belfast