

## Liverpool John Moores University

Title: HYDRAULICS GROUP PROJECT  
Status: Definitive  
Code: **4302CIVH** (123237)  
Version Start Date: 01-08-2021

Owning School/Faculty: Civil Engineering and Built Environment  
Teaching School/Faculty: Civil Engineering and Built Environment

Team	Leader
Geoffrey Parker	Y

**Academic Level:** FHEQ4      **Credit Value:** 20      **Total Delivered Hours:** 48  
**Total Learning Hours:** 200      **Private Study:** 152

### Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	24
Practical	12
Workshop	12

### Grading Basis: BTEC

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Future Focus e-learning task	AS1	1000 WORDS	10	
Portfolio	AS2	3500 WORDS	90	

### Aims

*To provide learners with an opportunity to develop the skills needed to devise and implement a realistic project scope and scheme of work and to evaluate and present a hydraulics related project as a group.*

*To encourage learners to become confident and effective in managing own personal and professional skills.*

## Learning Outcomes

After completing the module the student should be able to:

- 1 Devise a project scope and scheme of work relating to a typical hydraulics related problem.
- 2 Evaluate the group project and appraise its feasibility including environmental impact analysis, making recommendations for improvement.
- 3 Present the project outcome including records of project development and group activity.
- 4 Identify and reflect on their own personal and professional development during the project including the development of interpersonal and transferable skills.
- 5 Identify and reflect upon the following aspects of personal development: strengths and weaknesses, motivations and values and ability to work with others.

## Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

1000 WORDS	5					
3500 WORDS	1	2	3	4	5	

## Outline Syllabus

*Investigation and development of understanding of hydraulic principles relating to civil engineering projects.*

*Group roles and activities: team roles and responsibilities; record keeping processes.*

*Specification: client brief, constraints (environmental, operational, cost, time, etc.), legislation, quality control, health and safety.*

*Developmental stage: mind mapping, appraisal and review, feasibility analysis, field data, costing, calculations, risk and impact assessments, method statements and drawings.*

*Evaluation: initial proposal, final proposals, key decisions, group dynamics. Self-managed learning and learning styles: clear goal setting, dates for achievement, self-reflection, and personal preferences.*

*Effective learning: skills of personal assessment, planning, organisation and evaluation, feedback, learning achievements and disappointments.*

*Self-appraisal and portfolio building: skills audit, leadership skills, developing and maintaining a personal portfolio.*

*Interpersonal and transferable skills: initiative, reliability, problem solving, team player, time management, effective listening.*

## Learning Activities

Lectures, workshop and practical sessions.

## **Notes**

This module will develop learners' skills in terms of the evaluation and resolution of realistic practical hydraulic problems and the ability to work as part of a team. It enables the application of knowledge, understanding and skills developed in other modules, and where possible experiences from employment, to a major piece of work. The module is designed to bring together small groups of learners into teams so that they can coordinate their individual skills and abilities.