**Initial Client Meeting - Thursday 2nd of March, 9:30am - 12:30pm**

**Location:** AITC1 Meeting Room, Mount Stromlo

**Time:** 9:30-12:30

**Attendees:**

* Céline d'Orgeville
* Mark Blundell
* Brady Espeland
* Elliott Thorn
* Alex Stuchbery
* Jordan Davies
* Gerard Kennedy
* Markus Dirnberger
* Samson Nilon

**Agenda (as per Celine’s email of Feb 28):**

* Introductions
* Tour
* Intended learning outcomes for ENGN4421
* Expected supervision requirements
* Other supervision/technical assistance that your team may have access to
* Team's availability to work on this project, and course calendar (project start/end/grading)
* Team members role and responsibilities (if you already know)

**Relevant Information:**

Intended learning outcomes for ENGN4421

See the Course Website [bit.do/TechLauncher](http://bit.do/TechLauncher) for more details. The ENGN4221 project is running under the curation of the Techlauncher initiative.

*TechLauncher is an ANU initiative which enables students from any discipline to develop the research and professional skills required to use technology to bring great ideas to life and have a positive impact on our society.*

The idea is that ENGN4221 is the capstone course for the entire B.Eng. degree - the final project where all the elements of what we have learnt come together in a cohesive and sensible manner. This is the course where we can *show what we are capable of as engineers in a setting emulating the “real world” after university*.

Learning outcomes (for Techlauncher/ENGN4221 from the course outline):

1. (Technical) Synthesise technical knowledge and approaches to generate solutions to a complex design project.
2. (Problem Solving) Develop, analyse, and critically evaluate alternative options in order to justify and generate solutions in a real-world project.
3. (Teamwork) Apply project management and organisational skills to produce time-sensitive deliverables in a multi-disciplinary team.
4. (Communication) Effective transmission of decisions and solutions using appropriate media to professional and lay audiences.
5. (Reflection) Demonstrate and reflect on leadership and creativity as an individual and within a multidisciplinary team.

*Teams will be responsible for negotiating the outcomes and particulars of deliverables.*

*In order to facilitate this, we impose as few constraints as possible on how students run their projects. We place no constraints on the planning, methods, or technology used. The only constraints we impose are around a schedule of tutor meetings, project reviews and a public showcase.*

Expected supervision requirements

Attendance at monthly assessment

Fortnightly meetings, to be discussed

Other supervision/technical assistance that your team may have access to

Fortnightly meetings with tutor - expertise as yet unknown, systems engineering core is likely.

Team's availability to work on this project, and course calendar

Weekly workload

50 hours, 10 hours/person/week

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| --- | --- | --- |
| **Key Milestones/Assessment** | **Academic Week** | **Date** |
| Team Foundation/project selection | 1 | 25 Feb 17 |
| Project Progression review 1 | 5 | Week of 20 Mar 17 |
| Project Progression review 2 | 8 | Week of 24 Apr 17 |
| Project Poster | 9 | Week of 01 May 17 |
| Project Showcase | 10 | Week of 08 May 17 |
| Final Project Review | 11 | Week of 15 May 17 |

Team members role and responsibilities (based on current project knowledge**)**

|  |  |  |
| --- | --- | --- |
| **Team Member** | **Skills** | **Role & Responsibilities** |
| Jordan Davies | * Systems engineering * Materials - mech major * Python * Java * Solidworks * Welding | Systems engineering |
| Alex Stuchbery | * Instrumentation research experience * Adaptive optics experience * Over 200 hours on Solidworks * Physics major * Mechatronics major * Competent in: LaTeX, MATLAB, Mathematica, Python, Verilog | Systems integration and testing |
| Gerard Kennedy | * Mechatronics major * Applied math major * Physics minor * Systems engineering * Writing | Hardware & documentation |
| Markus Dirnberger | * Astrophysics background * Physics major * Some optics/semiconductors experience * Making pretty graphics for documentation purposes * Systems engineering | Hardware & documentation |
| Samson Nilon | * Mechatronics major * Systems integration * Control * Experience in optics lab * Electronics and embedded systems * MATLAB/C/C++/C# | Control |

Further Discussion Points

Initiate scope discussion:

What is/is not

Programs, resources, required learning, background knowledge

Integration of project within AITC

Summary of meeting

* Scope change to project regarding the design of an interface/mount to accommodate three different lasers to the EOS 1.8 telescope
* Project requirement structure will utilise main requirements and tiered goals
* Minimum scope discussion: Our minimum project scope is to develop the requirements for the interfacing of the three unique laser systems.
* Optimistic goals: Create a CAD model and perform vibrational analysis
* Some initial requirements: no drilling of holes, very susceptible to vibration
* Office 365 one drive file sharing
* Requirements review first up, constraints
* Design review mid term - tracking
* Final presentation == CDR not quite
* Safety to be specified for detailed design
* International standard for safety - context information