Syllabus: LANG1407 Academic English for Engineering Studies

Course Overview

LANG 1407, Academic English for Engineering Studies, is a 3-credit, common-core course taken by all engineering students. Over one semester, students attend three hours of class per week, complete a variety of out-of-class activities and prepare for assessed tasks.

LANG 1407 aims to develop students’ competence to communicate accurately and appropriately in engineering contexts in the university and beyond. LANG 1407 takes an active, collaborative, approach to learning. Every class includes at least one communicative task where students work together to share information, solve a problem or brainstorm ideas. Outside class, students are expected to take a proactive approach to meet with group members, find information and work together towards common goals. They are also expected to take responsibility for their own learning by reflecting on coursework performance and using self-reflection and feedback from others to improve.

Pre-requisites

LANG1402 (for those who do not have exemption from LANG1402)
No pre-requisite for those who have exemption from LANG1402

Competencies, CLE Core Areas for Learning (CAFLs) and LANG 1407 Intended Learning Outcomes (ILOs)

<table>
<thead>
<tr>
<th>HKUST Competencies</th>
<th>CLE Core Areas for Learning (CAFL) and LANG 1407 ILOS</th>
</tr>
</thead>
</table>
| Problem-solving PS03 | Synthesis  
1. Students can identify, evaluate, select, critique, integrate, and cite relevant information from engineering-related sources to provide evidence-based arguments. |
| Communication CMO2 | Substance  
2. Students can develop ideas clearly and fully. |
| Communication CMO2 | Coherence  
3. Students can organize ideas coherently, ensuring logical flow and focused development from sentence to text level. |
| Communication CMO1 | Language accuracy and form: written language and spoken language  
4. Students can use written language and spoken language that is accurate, fluent and contextually appropriate in engineering communication. |
| Communication CM03 | Audience awareness  
5. Students can demonstrate awareness of audience and reader needs and expectations and communicate with them appropriately. |
| Communication CMO4 | Multi-modality  
6. Students can use different modes of communication appropriately to strengthen message delivery. |
| Personal Development PD02 | Effective Learning  
7. Students can demonstrate effective learning skills by using appropriate learning strategies and evaluating progress through reflection and feedback. |
Assessment Overview and mapping to Course ILOs

<table>
<thead>
<tr>
<th>Module/assessment</th>
<th>Weighting as % of course grade</th>
<th>Course ILOs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethical case presentation (group and individual)</td>
<td>25%</td>
<td>2, 4, 5, 6</td>
</tr>
<tr>
<td>Module 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposal Report (individual)</td>
<td>40%</td>
<td>1, 3, 4, 5</td>
</tr>
<tr>
<td>Proposal Presentation (group and individual)</td>
<td>20%</td>
<td>2, 4, 5, 6</td>
</tr>
<tr>
<td>Assessed Self-Directed Learning (SDL) Tasks: Module 2: Reflection (individual)</td>
<td>Total = 15%</td>
<td>7, 8</td>
</tr>
<tr>
<td>Module 3: Library quizzes (individual)</td>
<td>4%</td>
<td>1</td>
</tr>
<tr>
<td>Module 3: TechVention form (group)</td>
<td>3%</td>
<td>2</td>
</tr>
</tbody>
</table>

Grading and Definitions

Letter grades range from A+ to F. The following table shows the conversion of letter grade and the average performance level for CLE courses:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Average Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-range</td>
<td>Excellent</td>
</tr>
<tr>
<td>B-range</td>
<td>Good</td>
</tr>
<tr>
<td>C-range</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>D</td>
<td>Marginal Pass</td>
</tr>
<tr>
<td>F</td>
<td>Fail</td>
</tr>
</tbody>
</table>

Note that the course grade is based on the overall performance throughout the term.

Course Content

Module 1 – Introduction to Academic Literacy for Engineering Studies

An introduction to the main themes of the course:

- Speaking like an engineer
- Collaborating like an engineer
- Writing like an engineer

Module 2 – Engineers and Social Responsibility

Students collaborate in groups to define and analyze an authentic engineering ethical case. Topics and themes include:
• Reading, analyzing and discussing authentic engineering ethical issues and relating these to engineering codes of conduct.
• Leveraging GenAI tools to assist in reading and analysis of source materials.
• Developing the ability to collaborate effectively in a group.
• Selecting and organising information and analysis to create an informative and stimulating presentation to meet the needs of the audience.
• Developing the speaking skills needed to deliver a fluent presentation in English.
• Learning how to use body language to enhance presentation impact.
• Developing the ability to lead a seminar discussion on an engineering ethics case.

Module 3 – Engineers and Creativity

Students work in groups to develop a proposal for an engineering innovation. Topics and themes include:

• Discussing and analyzing the concept of innovation and the engineering design process.
• Collaborating to develop an innovative engineering proposal.
• Researching a technology area, making effective use of a variety of resources.
• Developing the ability to synthesise information and analysis and use discipline-specific conventions for citing and referencing source materials.
• Learning how to write an academic proposal report for engineering, using an appropriate organizational structure and language style.
• Leveraging GenAI tools to give feedback and make suggestions for academic writing in the engineering discipline.
• Enhancing the presentation skills covered in Module 2.
• Developing the ability to use multiple modes of communication to enhance message delivery in a proposal presentation.