Programme Specification

BSc (Honours) Applied Geology (5365)
BSc (Honours) Applied Geology (Integrated) (4395)

Date of Approval: 29th October 2014
Date of Implementation: September 2016
Year of First Award: July 2018
1. **BSc (Honours) Applied Geology**

   Final award title: BSc (Honours) Applied Geology

   Level 4 Intermediate award title(s): Certificate of Higher Education

   Level 5 Intermediate award title(s): Diploma of Higher Education

   UCAS code: F610
   JACS code: F610

2. **Awarding Institution:** University of Plymouth

   Teaching institution(s): University of Plymouth

3. **Accrediting body**
   Accredited by the Geological Society of London

   Summary of specific conditions/regulations:
   The aims of the Geological Society of London accreditation scheme are:
   - to promote geoscience as an important area of professional education and training with appropriate and well maintained internal standards
   - to replace the current system of assessing individual academic qualifications by a formal and rigorous system of accrediting geoscience degree programmes that satisfy the academic requirements of Fellowship and Chartered Geologist status
   - thus to guarantee to potential students that a degree in an accredited programme will normally qualify the holder for admission to Fellowship of the Society and for the award of Chartered Geologist status after a specified period of professional development and relevant experience.
   - to provide the Society with an improved means of assessing and monitoring the content and quality of UK geoscience degree programmes.
   - to contribute to the development of European-wide professional standards in geoscience and to the free movement of Chartered Geologists within the European Union (EU).

   Further information on the accreditation scheme, including the requirements for accreditation can be found at http://www.geolsoc.org.uk/en/Education%20and%20Careers/Universities/Degree%20Accreditation/First%20Degree%20Programmes%20in%20Geoscience

   Date of re-accreditation: April 2018
4. Distinctive Features of the Programme and the Student Experience

The key features of the BSc (Hons) Applied Geology programme at Plymouth are:

- **Content:** Students on this course will develop a comprehensive understanding of geological processes and products. They will focus on whether these products form economically important resources (e.g. hydrocarbons, mineral deposits, aggregates etc.).

- **Discipline coverage and choice:**
  A coherent and progressive curriculum that integrates traditional and emerging subject areas in Applied Geology. Students are able to select specialisms within the subject whilst maintaining academic breadth.

- **Fieldwork, experiential learning and additional opportunities:**
  A comprehensive, progressive and innovative fieldwork training programme, with extensive laboratory work and opportunities to practise Applied Geology overseas or work on an industrial placement project.

- **Student support:**
  Approachable, accessible and committed Geology staff, who provide academic guidance and student support via a comprehensive personal tutoring system, discussion in practicals, fieldwork and one-to-one advice on undergraduate dissertations. In addition, Stage 2 students provide support, under staff supervision, to Stage 1 students as part of a Peer Assisted Learning (PAL) scheme.

- **Personal and professional development:**
  Personal and professional skills development and careers education, to enhance employability and promote lifelong learning, are emphasised throughout the curriculum, specifically in a final year professional skills module, the regular use of industry-standard software, industry-relevant examples and guest speakers, and the opportunity for a professional placement.

- **Learning environment:**
  Learning and teaching enriched by:
  o the internationally-recognised research and industry-related consultancy of teaching staff.
  o purpose-built, well-equipped, modern and accessible laboratories and excellent field locations in the local area.
  o positive engagement with the institution’s hallmark of innovation in teaching and learning.
• **External professional recognition of programmes:**
  The Applied Geology programme is accredited by the Geological Society of London. (see section 3 of this document). The accreditation recognises that teaching meets a professional benchmark and is of the highest quality through approval by an independent body of academics and industrialists. Graduates of accredited degrees partially fulfil the requirements for Chartered Geologist status.

5. **Relevant QAA Subject Benchmark Group(s)**
The BSc (Hons) Applied Geology programme and its content has been developed around the 2014 Earth Sciences, Environmental Sciences and Environmental Studies QAA subject benchmark statements. A copy of this document can be found at [http://www.qaa.ac.uk/assuring-standards-and-quality/the-quality-code/subject-benchmark-statements](http://www.qaa.ac.uk/assuring-standards-and-quality/the-quality-code/subject-benchmark-statements). These benchmark statements are referred to throughout the intended learning outcomes for this programme.
6. Programme Structure
Below are diagrams outlining the structure of the BSc (Hons) Applied Geology programme. Details relating to the content of each module can be found in the individual PUMR’s

6.1. Stage 1 / Level 4

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>$GEOL1001$: The Dynamic Earth 20 credits</td>
<td>Plymouth Plus (PPlus)* 20 credits</td>
</tr>
<tr>
<td>$GEOL1002$: Earth Materials 20 credits</td>
<td>$GEOL1004$: Palaeontology and Stratigraphy 20 credits</td>
</tr>
<tr>
<td>GEOL1003: Geosystems 20 credits</td>
<td>GEOL1005: Geological Maps and Structural Geology 20 credits</td>
</tr>
</tbody>
</table>

*Tutorials.* Modules that include the Stage 1 timetabled tutorial provision for all Earth Science degree programmes.

*Plymouth Plus (PPlus).* Students will do a PPlus module at the start of Semester 2. They will make one module from the following list.

1. Natural Hazards GEES1001PP
2. Climate Change and Energy GEES1002PP
3. Sustainable Futures GEES1003PP
4. Our Ocean Planet OS106PP
5. Essential Numeracy MATH1609PP

PPlus brings together students from different disciplines to apply problem-based learning, with a view to developing a more holistic understanding of their subject and how it sits within a wider context.

**NOTE:** The integrated Applied Geology programme (4395) consists of Stage 1 (Level 4) of the standard Applied Geology programme together with ILS1005: Interactive Learning Skills and Communications. Successful completion of both of these components allows students to proceed to Stage 2 (Level 5) of the Applied Geology programme.
### 6.2. Stage 2 / Level 5

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester 2</td>
<td>$GEOL2004: Stratigraphy and Earth History 20 credits</td>
<td>GEOL2005: Structural and Metamorphic Geology 20 credits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$GEOL 2006: Geological Fieldwork 20 credits</td>
<td></td>
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</tr>
</tbody>
</table>

$ Tutorials. Modules that include the Stage 2 timetabled tutorial provision for all Earth Science degree programmes.

**NOTE:** Students wishing to undertake an optional placement year in Stage 3 will normally need to complete the Stage 2, Semester 1 (zero credit) module APIE217: Preparation for a Year Long Work Placement in Earth Sciences. We recognise the value of placement learning for students in fulfilling professional imperatives as well as offering the opportunities to enhance students’ future employability.

### 6.3. Stage 3 / No level

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>**APIE316: Placement in Earth Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester 2</td>
<td>**APIE316: Placement in Earth Sciences</td>
</tr>
</tbody>
</table>

** Students who pass the placement year APIE316 they will receive a Certificate of Industrial/Professional Experience
6.4. Stage 4 / Level 6

<table>
<thead>
<tr>
<th>Semester 1</th>
<th></th>
<th>Semester 2</th>
</tr>
</thead>
</table>
|  | $\text{GEOL3001: Geological Mapping Research Project and Professional Skills}$  
$40 \text{ credits}$ |  | Option 1  
$20 \text{ credits}$ |
|  |  |  | Option 2  
$20 \text{ credits}$ |
|  |  |  | Option 3  
$20 \text{ credits}$ |
|  |  |  | GEOL3003: Geophysics  
$20 \text{ credits}$ |

$\text{Summer Fieldwork:}$ Students will normally be expected to undertake some (up to 28 days) fieldwork between Stage 2 and Stage 4 to collect primary data as part of their Stage 4 project module (GEOL3001). If a student undertakes a placement year (Stage 3) then they can undertake this fieldwork in the summer before they start their placement or in the summer after they have finished.

**Tutorials.** For all Stage 4 Earth Science degree programmes the project advisor acts as a student's academic tutor throughout the year. There are no formal timetabled sessions.

**Stage 4 / Level 6 Option 1 and 2: 40 credits from**
- GEOL3006: Geological Information Systems (GIS) and Remote Sensing (20 credits)
- GEOL3010: Engineering Geology (20 credits)
- GEOL3011: Petroleum Geoscience (20 credits)
- GEOL3012: Mineral Georesources (20 credits)

**Stage 4 / Level 6 Option 3: 20 credits from**
- GEOL3008: Advanced Geological Fieldwork (20 credits)
- GEOL3009: Earth Science Professional Case Studies (20 credits)
7. **Programme Aims**

1. To provide a contemporary and intellectually stimulating programme of study in Applied Geology, that is science-based and practical, and develops knowledge and understanding of geological processes and products and whether these products form economically important resources (e.g. hydrocarbons, mineral deposits, aggregates etc.).

2. To enable students to acquire transferable, technical, enterprise and professional skills appropriate to personal and career development, life-long learning and citizenship, including problem-solving, critical thinking, the abilities to apply and develop their own knowledge.

3. To enable students to develop and apply safe and ethical working practices, and develop and understanding of the concepts and practice of environmental responsibility and sustainability in the context of Geology.

4. To develop, in students, an attitude of professional competence, and to provide the foundation for a career as a professional Applied Geologist.

8. **Programme Intended Learning Outcomes**

These are based around, though not exactly the same as, the subject knowledge and graduate key skills outlined in the 2007 Earth Sciences, Environmental Sciences and Environmental Studies QAA subject benchmark statements referred to in section 5.

8.1. **Knowledge and understanding (KU)**

On successful completion a graduate should have developed:

- A coherent, detailed and multi-disciplinary knowledge of Applied Geology (including Engineering Geology, Petroleum Geoscience and Mineral Georesources), at least some of which is at, or informed by, the forefront of knowledge in the discipline, both from an academic and industrial standpoint.

- An understanding of geological processes related to the formation of Earth’s natural resources and their exploitation by industry.

- A detailed knowledge of the terminology, nomenclature and classification systems used in a range of applied geological disciplines.

- An appreciation of uncertainty, ambiguity and the limits of knowledge applicable to a range of applied geological disciplines.

8.2. **Cognitive and intellectual skills (CIS)**

On successful completion a graduate should have developed:

- The ability to make judgments or find one or more solutions to a range of applied geological problems, drawing on a critical evaluation of the published literature, including industry reports, known assumptions, methods and data, some of which may be incomplete.
8.3. **Practical skills (PS)**
On successful completion a graduate should have developed:
- The ability to be able to evaluate, select and apply appropriate applied geological techniques to the collection, analysis, and presentation of applied geological information.
- The ability to undertake field and laboratory investigations in a responsible and safe manner, paying due attention to risk assessment, rights of access, relevant health and safety regulations, and sensitivity to the impact of investigations on the environment and stakeholders.

8.4. **Key Transferable skills (KTS)**

8.4.1. **Communication skills**
On successful completion a graduate should have developed:
- The ability to receive and respond to a variety of information sources (e.g. textual, numerical, verbal and graphical).
- The ability to communicate in a professional manner to a variety of audiences, including industry representatives, in written, verbal and graphical forms.

8.4.2. **Numeracy & communications & information technology (C & IT) skills**
On successful completion a graduate should have developed:
- The ability to appreciate issues of sample selection, accuracy, precision and uncertainty during collection, recording and analysis of data in the field and laboratory.
- The ability to prepare, process, interpret and present data, using appropriate qualitative and quantitative techniques and packages, some of which will be industry facing.

8.4.3. **Interpersonal/teamwork skills**
On successful completion a graduate should have developed:
- The ability to identify individual and collective goals and responsibilities and perform in a manner appropriate to these roles.
- The ability to be able to evaluate their performance as an individual and a team member.

8.5. **Employment related skills (ERS)**
On successful completion a graduate should have developed:
- The ability to manage their own learning and to make use of scholarly reviews and primary sources (e.g., refereed research articles and/or original materials appropriate to the field of Applied Geology).
9. Admissions Criteria, including APCL, APEL and DAS arrangements

9.1. BROAD SCOPE
We welcome applications from people who, in addition to any formal qualifications:
- can demonstrate the ability to succeed on the chosen programme;
- will derive the greatest benefit from studying at the University;
- have a commitment and enthusiasm to learn.

All applications are considered on individual merit in relation to the aims and outcomes of the programme.

9.2. EQUALITY OF OPPORTUNITY
The University aims to ensure that all applicants receive fair treatment. In line with its Strategic Plan, the University has strategies to promote equality of opportunity, widen participation and encourage access. In particular we welcome applications from:
- younger students from disadvantaged backgrounds;
- mature students;
- people with disability

Further information on equality for students can be found at:
http://www1.plymouth.ac.uk/equality/Pages/Equality-for-Students.aspx

9.2.1. Disability
We welcome and support students with disabilities, and we endeavour to meet specific needs. The Disability ASSIST Service supports disabled students across the University. Further information about the advice and support before, during and after application can be found at:
http://www1.plymouth.ac.uk/equality/Pages/Disability-Equality.aspx

9.3. QUALIFICATIONS FOR ENTRY (UNDERGRADUATE)

9.3.1. AS/A-Level and Vocational A-Level
We welcome a mix of AS/A-Level and Vocational A-Level qualifications as well as specialisation in either. The table below sets out normal minimum qualifications required for entry to First Degree/Diploma in Higher Education programmes.
The standard entry requirements will be:
- For BSc (Hons) Applied Geology - a minimum of two A-Level subjects to include at least one science subject (Physics, Chemistry, Biology, Environmental Science, Geography, Geology or Maths). Excluding General Studies, Key Skills and any other tariff point qualifications;
- the equivalent in the Vocational A-Level;
- the equivalent as a mix of both qualifications.

We encourage applicants to study more subjects at AS Level or the equivalent.

Offers will be based on results at the end of year 13, although AS grades gained at the end of year 12 may be used in conjunction with the predicted A-Level or Vocational A-Level grades as an important indicator of ability.

Not all ‘Curriculum 2000’ qualifications are acceptable for certain programmes. The acceptability of qualifications by programme is stated in the current University Prospectus, and on the University’s website, www.plymouth.ac.uk. Some programmes may have specific entry requirements, e.g., portfolio. Offers made to mature applicants (over 21) may take account of work and life experience.

**Entry requirements (2015/16) summary for BSc (Hons) Applied Geology:**

<table>
<thead>
<tr>
<th>Qualifications accepted</th>
<th>Level required</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-Level / AS Level / Vocational A-Level</td>
<td><strong>300-320</strong> points, minimum of 2 A Levels, including grade C from either: Biology, Maths, Physics, Chemistry, Environmental Science/Studies, Applied Science, Geography, Geology or Technology. Excluding general studies, critical thinking, citizenship, Key Skills and any other tariff point qualifications. Other combinations and non-A level qualifications considered.</td>
</tr>
<tr>
<td>GCSE or equivalent</td>
<td>GCSE in English and Mathematics (at grade C or above) or equivalent are required.</td>
</tr>
<tr>
<td>General Studies A-Level</td>
<td>Is not accepted as part of a points offer.</td>
</tr>
<tr>
<td>AVCE Double Award: 12 unit</td>
<td><strong>300-320</strong> points for all programmes. Subject requirement varies please see prospectus or refer to admissions team for further details. Additional units/A-Level subject will normally be required.</td>
</tr>
<tr>
<td>BTEC National Certificate/Diploma</td>
<td>BTEC Diploma – <strong>300-320</strong> points: DDM – science related subject Subject requirement varies please see</td>
</tr>
<tr>
<td>Qualification</td>
<td>Requirements</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>BTEC Certificate</td>
<td>BTEC Certificate – 300-320 points (DD = 240 + other) Additional Units/A-Level subject will normally be required if only studying BTEC certificate.</td>
</tr>
<tr>
<td>Access to Higher Education</td>
<td>Pass a named Access to HE Diploma (Science), (including GCSE English and Maths grade C or above or equivalent) with at least 45 credits at Level 3, of which 30 credits must be at Distinction and 15 credits at Merit or higher in relevant science units. This offer would be made to ensure level of performance and has the flexibility to incorporate specific course modules an applicant is taking and specifying the level required.</td>
</tr>
<tr>
<td>National Vocational Qualification (including Advanced Modern Apprenticeships)</td>
<td>An appropriate NVQ at Level 3/AMA will be considered with other information that demonstrates your ability to successfully complete the programme you have selected.</td>
</tr>
<tr>
<td>Scottish Qualifications Authority</td>
<td>300-320 points for all programmes. Science Subject requirement varies please see prospectus or refer to admissions team for further details.</td>
</tr>
<tr>
<td>Irish Leaving Certificate</td>
<td>Within the range 300-320 points AABBB-ABBBBB must include a Science Subject in Advanced Higher, requirement varies please see prospectus or refer to admissions team for further details.</td>
</tr>
<tr>
<td>International Baccalaureate</td>
<td>Offers will be made based on total points of 30 overall to include a 4 at a higher level. Subject requirement varies please see or prospectus refer to admissions team for further details.</td>
</tr>
<tr>
<td>European Baccalaureate</td>
<td>75% overall with 6 in science and maths (English of 7.5 will be asked if not taken GCSE level) Subject requirement varies please see prospectus or refer to admissions team for further details.</td>
</tr>
<tr>
<td>Greek National Apolytirion</td>
<td>18/20 with at least 18/20 in either Biology, Maths, Physics, Chemistry, Environmental Science/Studies, Applied Science, Geography, Geology or Technology subject.</td>
</tr>
<tr>
<td>PUIC Integrated Programme</td>
<td>Admission to the programme is subject to successful completion of the Plymouth University International College (PUIC) Foundation Year.</td>
</tr>
</tbody>
</table>
9.3.2. Key Skills
We encourage the attainment of Key Skills at a high level to enhance performance on a higher education programme. Although key skills tariff points do not count towards the admissions tariff score, they will enhance your performance on an Earth Sciences degree programme.

9.3.3. Accreditation of Prior Certificated Learning (APCL) and Assessment of Prior Experiential Learning (APEL)
The University’s regulations for Accreditation of Prior Certificated Learning (APCL) and Assessment of Prior Experiential Learning (APEL) are set out in the ‘University Academic Regulations’, a copy of which can be found at http://www1.plymouth.ac.uk/extexam/pages/academic-regulations.aspx

We welcome evidence of prior learning and experience from applicants. Due to the range and mixture of prior qualification and experience applications presenting such evidence will be considered on an individual basis by the Admissions Tutor in consultation with the programmes team.

9.3.4. English Language Requirements
Students are required to produce evidence of English language ability. This will normally be the equivalent of:

- GCSE Grade C or above in English language;
- IELTS average score of 6.0 or above with a score of at least 6.0 in the written component and 5.5 in each of the other three components (listening, reading and speaking);
- Equivalencies are detailed in ‘Admissions Information and Procedures’ issued by the University Secretariat.

9.3.5. Overseas Qualifications
The University Secretariat provides advice on, and maintains oversight of, the acceptability of any qualification from overseas offered for entry.

9.4. CONTRACT OF ADMISSION
The University’s rules and regulations are incorporated into the contract made with the student. All students are required as a condition of enrolment to accept those rules and regulations that is set out:

- in the Student Handbook;
- on the University’s website and available on request from the University Secretariat.

Any offer of a place made by the University is made on the basis of the applicant’s:

- acceptance of the University’s rules and regulations as published and amended from time to time.
• acceptance of the following statement:
  "The University Prospectus describes the undergraduate programmes offered by the University. Further documents will be issued to students to describe the educational services offered by the University, in particular the Code of Conduct and details of enrolment and assessment. These are contained in the Student Handbook and the Programme Handbook. The University undertakes all reasonable steps to provide the educational services described in the Prospectus and in the documents described but it does not guarantee the provision of such services. Should industrial action or circumstances beyond the control of the University interfere with its ability to provide educational services, the University undertakes to use all reasonable steps to minimise any resultant disruption."
• undertaking to pay the fees required for the programme and any other fees for services offered by the University and accepted, such as accommodation.
• statements made on the application form, where the discovery of false statements or omissions may lead to the offer being withdrawn (or in the case of students enrolled, to their being required to withdraw).

**Partnership Arrangements**

**PUIC Stage 1 Equivalent Integrated programmes**
On successful completion of their Stage 0 programme PUIC students progress to Stage 1 of their designated programme and are taught and assessed by PU staff. Additionally, the students will undertake a module (ILS 1005) of skills and support designed to facilitate their transition to the HE learning culture in the UK.

Progression to Stage 1 Integrated programmes is dependent upon achieving 50% in all modules of the PIUC Stage 0 programme.

Progression to PU Stage 2 is dependent upon successful completion of the PU Stage 1 and at least 60% in ILS 1005 (The PUIC DMD for ILS 1005 is appended).

**10. Progression criteria for Final and Intermediate Awards**
The University’s standard regulations for progression apply. A copy of the regulations can be found at [http://www1.plymouth.ac.uk/extexam/pages/academic-regulations.aspx](http://www1.plymouth.ac.uk/extexam/pages/academic-regulations.aspx)

For PUIC student’s progression onto Stage 2 (Level 5) of their degree is subject to passing Stage 1 (Level 4) of the PUIC Equivalent Integrated Programme. This consists of the standard Stage 1 of the programme **plus** ILS1005: Interactive Learning Skills and Communications.
11. Exceptions to Regulations
There are no exceptions to regulation with respect to the BSc (Hons) Geology programme.

12. Transitional Arrangements
The normal arrangement in this programme specification are introduced from September 2015. The first cohort of students to take programme described here, in its entirety, will graduate in 2018. Students graduating in 2016 and 2017 will have the interim arrangements described below

<table>
<thead>
<tr>
<th>Year of entry</th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3/4</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>new</td>
<td>new</td>
<td>new</td>
</tr>
<tr>
<td>2014</td>
<td>old</td>
<td>new</td>
<td>new</td>
</tr>
<tr>
<td>2013</td>
<td>old</td>
<td>old</td>
<td>new</td>
</tr>
</tbody>
</table>

Below is a list of all the old EAR coded modules and how they can be mapped onto the new GEOL coded modules. This table should be used when students are required to repeat credits from the old degree programmes after the new programmes have started.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAR112</td>
<td>Earth Materials</td>
<td>GEOL1002</td>
<td>Earth Materials</td>
</tr>
<tr>
<td>EAR113</td>
<td>Quantitative and Experimental Geology</td>
<td>GEOL1003</td>
<td>Geosystems</td>
</tr>
<tr>
<td>EAR114</td>
<td>Introducing Geological Maps and Remote Sensing</td>
<td>GEOL1005</td>
<td>Geological Maps and Structural Geology</td>
</tr>
<tr>
<td>EAR115</td>
<td>Introductory Fieldwork and Skills [Geology]</td>
<td>GEOL1001</td>
<td>The Dynamic Earth or a Plymouth Plus module</td>
</tr>
<tr>
<td>EAR118</td>
<td>Planet Earth</td>
<td>GEOL1001</td>
<td>The Dynamic Earth</td>
</tr>
<tr>
<td>EAR119</td>
<td>Stratigraphy and the Fossil Record</td>
<td>GEOL1004</td>
<td>Palaeontology and Stratigraphy</td>
</tr>
<tr>
<td>EAR210</td>
<td>Fieldwork and Skills</td>
<td>GEOL 2006</td>
<td>Geological Fieldwork</td>
</tr>
<tr>
<td>EAR211</td>
<td>Geospatial Techniques</td>
<td>GEOL2003</td>
<td>Geospatial Techniques</td>
</tr>
<tr>
<td>EAR212</td>
<td>Palaeontology and Sedimentology</td>
<td>GEOL2001</td>
<td>Sedimentology and Palaeontology</td>
</tr>
<tr>
<td>EAR213</td>
<td>Stratigraphy and Earth History</td>
<td>GEOL2004</td>
<td>Stratigraphy and Earth History</td>
</tr>
<tr>
<td>EAR215</td>
<td>Structural Geology and Tectonics</td>
<td>GEOL2005</td>
<td>Structural and Metamorphic Geology</td>
</tr>
<tr>
<td>EAR219</td>
<td>Igneous and Metamorphic Geology</td>
<td>GEOL2002</td>
<td>Structures, Magmas and Volcanoes</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>EAR310</td>
<td>Research Project and Professional Skills</td>
<td>GEOL3001</td>
<td>Geological Mapping Research Project and Professional Skills</td>
</tr>
<tr>
<td>EAR311</td>
<td>Geophysics</td>
<td>GEOL3003</td>
<td>Geophysics</td>
</tr>
<tr>
<td>EAR312</td>
<td>Advanced Geological Fieldwork</td>
<td>GEOL3008</td>
<td>Advanced Geological Fieldwork</td>
</tr>
<tr>
<td>EAR313</td>
<td>Advanced Palaeontology and Sedimentology</td>
<td>GEOL3004</td>
<td>Advanced Palaeontology and Sedimentology</td>
</tr>
<tr>
<td>EAR314</td>
<td>Advanced Tectonics</td>
<td>GEOL3005</td>
<td>Tectonics</td>
</tr>
<tr>
<td>EAR315</td>
<td>Geological Remote Sensing and GIS</td>
<td>GEOL3006</td>
<td>Geological Information Systems (GIS) and remote sensing</td>
</tr>
<tr>
<td>EAR316</td>
<td>Engineering Geology</td>
<td>GEOL3010</td>
<td>Engineering Geology</td>
</tr>
<tr>
<td>EAR317</td>
<td>Georesource Exploration and Production</td>
<td>GEOL3011 or GEOL3012</td>
<td>Petroleum Geoscience or Mineral Georesources</td>
</tr>
<tr>
<td>EAR318</td>
<td>Geohazards</td>
<td>GEOL3007</td>
<td>Magmatic Processes</td>
</tr>
</tbody>
</table>
Mapping and Appendices:

13.1  ILO’s against Modules Mapping
See Appendix 1

13.2  Assessment against Modules Mapping
See Appendix 2

13.3  Skills against Modules Mapping
See Appendix 3

13.4  ILS1005 Module Record
Appendix 4
APPENDIX 1: ILO's against Modules Mapping

<table>
<thead>
<tr>
<th>Knowledge and understanding (KU)</th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A coherent, detailed and multi-disciplinary knowledge of Applied Geology (including Engineering Geology, Petroleum Geoscience and Mineral Georesources), at least some of which is at, or informed by, the forefront of knowledge in the discipline, both from an academic and industrial standpoint.</td>
<td>All modules</td>
<td>All modules</td>
<td>All modules</td>
</tr>
<tr>
<td>• An understanding of geological processes related to the formation of Earth's natural resources and their exploitation by industry.</td>
<td>All modules</td>
<td>All modules</td>
<td>All modules</td>
</tr>
<tr>
<td>• A detailed knowledge of the terminology, nomenclature and classification systems used in a range of applied geological disciplines.</td>
<td>All modules</td>
<td>All modules</td>
<td>All modules</td>
</tr>
<tr>
<td>• An appreciation of uncertainty, ambiguity and the limits of knowledge applicable to a range of applied geological disciplines.</td>
<td>GEOL1001, 1003, 1005</td>
<td>GEOL2003, 2006</td>
<td>GEOL3001, 3007, 3008, 3009</td>
</tr>
</tbody>
</table>

| Cognitive and intellectual skills (CIS) | |
|----------------------------------------|---------|---------|---------|
| • The ability to make judgments or find one or more solutions to a range of applied geological problems, drawing on a critical evaluation of the published literature, including industry reports, known assumptions, methods and data, some of which may be incomplete. | All modules | All modules | All modules |

| Practical skills (PS) | |
|----------------------|---------|---------|---------|
| • The ability to be able to evaluate, select and apply appropriate applied geological techniques to the collection, analysis, and presentation of applied geological information. | GEOL1002, 1003, 1004, 1005 | GEOL2001, 2002, 2004, 2005, 2006 | GEOL3001, 3003, 3008 |
| • The ability to undertake field and laboratory investigations in a responsible and safe manner, paying due attention to risk assessment, rights of access, relevant health and safety regulations, and sensitivity to the impact of investigations on the environment and stakeholders. | GEOL1004 | GEOL2002, 2003, 2005, 2006 | GEOL3001, 3003, 3008 |
### Key Transferable skills (KTS)

#### 1. Communication skills
- The ability to receive and respond to a variety of information sources (e.g. textual, numerical, verbal and graphical).
  - GEOL1005
  - GEOL3001, 3003, 3006, 3008, 3009, 3010, 3011
- The ability to communicate in a professional manner to a variety of audiences, including industry representatives, in written, verbal and graphical forms.
  - GEOL1004
  - All modules
  - GEOL3001, 3003, 3006, 3008, 3009, 3010, 3011

#### 2. Numeracy & communications & information technology (C & IT) skills
- The ability to appreciate issues of sample selection, accuracy, precision and uncertainty during collection, recording and analysis of data in the field and laboratory.
  - GEOL1003
  - GEOL2002, 2003
  - GEOL3012
- The ability to prepare, process, interpret and present data, using appropriate qualitative and quantitative techniques and packages, some of which will be industry facing.
  - GEOL1003
  - GEOL2002, 2003
  - GEOL3012

#### 3. Interpersonal/teamwork skills
- The ability to identify individual and collective goals and responsibilities and perform in a manner appropriate to these roles.
  - Not assessed
  - GEOL2004, 2006
  - GEOL3001, 3003
- The ability to be able to evaluate their performance as an individual and a team member.
  - Not assessed
  - GEOL3001, 3003

### Employment related skills (ERS)
- The ability to manage their own learning and to make use of scholarly reviews and primary sources (e.g., refereed research articles and/or original materials appropriate to the field of Applied Geology).
  - Not assessed
  - GEOL2006
  - GEOL3001
- The ability to communicate information, ideas, problems and solutions to both specialist (academic and industry) and non-specialist audiences.

| Not assessed | GEOL2006 | GEOL3001 |
## Appendix 2: Assessment against Modules Mapping

<table>
<thead>
<tr>
<th>Module code</th>
<th>Assessed Prac(s)</th>
<th>Presentation</th>
<th>Dissertation</th>
<th>Portfolio</th>
<th>Report(s)</th>
<th>Group Poster</th>
<th>Online Test</th>
<th>Exam</th>
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<tbody>
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<td>GEOL1001</td>
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</table>
Appendix 3: Skills against Modules Mapping
Key skills are covered in the Intended Learning Outcomes and have been mapped against modules in Appendix 1.
Appendix 4 : ILS1005 Module Record

This Definitive Module Document (DMD) is designed for all prospective, enrolled students, academic staff and potential employers. It provides a concise summary of the main features of the module and the Specific Learning Outcomes (LOs) that a typical student might reasonably expect to achieve and demonstrate if he/she takes full advantage of the learning opportunities.

Detailed information regarding the content and assessment criteria of this module should be considered alongside the appropriate Programme Specifications (PSs) and Module Guide (see MG ILS1005).

Module Name: Interactive Learning Skills and Communication (ILSC)

Module Code: ILS1005

Module Duration (per semester): Thirteen (13) weeks

Contact Hours (per semester): 52

Directed Study Hours (per semester): -

Self-directed Study Hours (per semester): 98

Notional Hours (per module): 150

Teaching Rotation: 01,03

Teaching Body: PUIC

Articulating Institution: Plymouth University

Articulating Faculty: Faculty of Science and Environment; Faculty of Arts and Humanities; Plymouth Business School

University Campus: Drakes Circus

Pathways (on which this module is offered): All Integrated Pathways

Credit Points: Zero

Pathway Stage: PUIC Stage 2 (Plymouth University Stage 1)

Stage FHEQ Level: 4

Language of Delivery: English

Language of Assessment: English

E-Learning: IT software packages (Word, PowerPoint, Excel), internet access; College Portal; University Student Portal.

Moderation: See CPR QS9

Standard Progression Criteria: Summary: minimum overall pass mark of 65% (Grade C*) across all assessment events and a minimum of 65% in assessments B, D and E.

Failure to Progress: [Summary: a student may not fail a module assessment on more than one (1) occasion, failure of the module assessment once requires that a student re-take the failed assessment thereafter re-take the entire module at full cost; failure of a student to complete a module on the re-take of that module will result in referral to the College Learning and Teaching Board for a student management decision. The University will not be incumbent to progress students who fail].

Aims:

This module has been designed to be delivered in conjunction with the Integrated FHEQ Level 4 (equivalent) first year degree and associated programmes in order to benchmark and satisfy the transfer criteria with regard to student communication and learning skills competency. This module is part of a wider pedagogic approach taken by NAVITAS UK to ensure the preparedness of its students and graduates with a focus on the relevant transferable and portable skills of effective and professional communication to support further study at a variety of levels, whether it involves higher education or further post-degree vocational programmes and/or professional awards, as well as providing a basis to foster career and life-building skills.

Utilising a number of practical activities to allow candidates to achieve these essential skills, students will be introduced to techniques and strategies to manage speech anxiety; enhance grammar and vocabulary; think critically under pressure; research, package and deliver
logical and persuasive communication both orally and in a variety of written formats (inclusive of dissertation); summarise; become an effective listener; understand cultural and gender differences; and work effectively in a team.

This module ensures that graduates have attained the prescribed level of inter-disciplinary communication competence described as Level B2 ‘Proficient User’ by the Council of Europe, see *Common European Framework of Reference for languages: Learning, teaching assessment 2001*, Council of Europe, CUP, Cambridge, p. 24, Table 1. *Common Reference Levels: global scale*. This module is ACL accredited and benchmarked: ACL is a leading provider of English language provision to students seeking entry to Australian HEIs and a variety of levels. ACL now forms part of Navitas English and carries dual accreditation by the Australian National ELT Accreditation Scheme (NEAS) and the NSW Government’s Vocational Education and Training Accreditation Board (VETAB). Navitas English is also a Registered Training Organisation (RTO) under the Australian Quality Training Framework (AQTF).

Successful completion of this module indicates that students have obtained a good understanding of and ability to apply the requisite knowledge and skills to enable them for successful onward study at undergraduate degree level.

### Topics
- Preparation for college and university programmes
- Personal development planning (PDP)
- Presentation skills
- Listening skills
- Skills for self-directed study
- Appropriateness
- Library induction
- Writing at university
- Analysing questions/titles
- Planning written work projects
- Teamwork
- Composition and style
- Summarising techniques
- Revision techniques
- Examination overview and techniques
- Critical analysis and use of evidence

### Specific Learning Outcomes

**Knowledge and Understanding**

Upon completion of this module students will be able to demonstrate their knowledge and understanding of the following:

1. The structure of the UNIVERSITY degree programmes and classification.
2. UNIVERSITY undergraduate degree scheme structures and awards.
3. UNIVERSITY laboratory, library and e-learning facilities; College resources and personal resources to support study.
4. Time management and its application to notional hours of study and assessment events.
5. Public speaking techniques and managing communication apprehension.
6. Non-verbal communication techniques.
7. Listening skills and knowledge dissemination and retention techniques.
8. The importance of ensuring a clear basic understanding of the history of scholarship with regard to certain subject areas and/or the use of appropriate nomenclature to aid communication.
9. What language styles to employ in a variety of situations to ensure appropriateness and clarity of communication.
10. A comprehensive set of clear writing techniques (plain English, factual and persuasive writing) that can be applied to a variety of written formats.
11. How to create appropriate and effective document layouts.
12. The importance and basic precepts of style when composing written work in a variety of forms.
13. How to embed the concept of continuous improvement and objectivity in relation to an individual’s academic performance.
14. Professional communication and presentation.
15. How to enhance personal creativity and lateral thought processes.
16. Examination techniques and skills.
17. Design and communicate effective messages to a variety of audiences.
18. How to work effectively as a team member.
How to work effectively as an individual.

How to apply basic research and referencing techniques to formulate reasoned academic opinion in a variety of forms so as to avoid plagiarism and collusion.

B Intellectual / Cognitive Skills

1. Ability to employ appropriate nomenclature and terminologies across subject contexts.
2. Ability to synthesise and interpret various modes of information when delivered in different formats.
3. Make full use of library and e-learning (catalogue and bibliographic) resources.
4. Ability to effectively retain and communicate knowledge and understanding of topics covered in the module in a comprehensive manner under timed conditions without recourse to learning aids.

C Practical Skills

1. Develop organisational skills for deadline submission.
2. Proficiently use techniques and technology in the collation, interpretation and presentation of data in oral and written formats.
3. Develop oral presentation skills.
4. Develop written skills for a variety of formats and requirements.

D Transferable Skills

1. Select, read, digest, summarise and synthesise information material in a variety of forms, both qualitative and quantitative (text, numerical data and diagrammatic) and in an appropriate manner to identify and determine key facts/themes, relevance and assessment of problems and identification and implementation of solutions.
2. Use and clearly communicate discursive, numerical, statistical and diagrammatic ideas, concepts, results and conclusions using appropriate technical and non-technical language and language style, structure and format.
3. Embedding the importance of self-study and reliance. This involves cultivating and developing a responsibility within each student to take cognizance for their own learning, initiative, effective time-management and self-discipline within the academic and professional environments.

Generic Learning Outcomes

Key skills demonstrated:

Personal organisation and time-management skills to achieve research goals and maintain solid performance levels;

Understanding of the importance of attaining in-depth knowledge of terminology as used in a given topic area, as a basis to further study;

Understanding, knowledge and application of appropriate and effective methods of communication to meet formal assessment measures;

Understanding and knowledge as to the development of the industry and/or scholarship in relation to a given topic under study;

Understanding of the rules applying to plagiarism and collusion;

Ability to work as an individual, in a small team and in a larger group to effect data collation, discussion and presentation of evidence;

Meet conveying assessment deadlines – based on punctuality and organisation with reference to class, group and individual sessions within a dynamic and flexible learning environment with variable contact hours and forms of delivery.

Communicate clearly using appropriate nomenclature to enhance meaning in all oral and written assessments with no recourse to collusion or plagiarism.

Present clearly, coherently and logically in a variety of oral and written formats using a variety of appropriate qualitative and quantitative tools and evidence bases.

Demonstrate an understanding of the current themes of a given topic, the academic and practical foundation on which they are based – demonstrated by a lack of plagiarism and need for collusion in both individual and group work.

Collate, summarise, reason and argue effectively on a given topic without reference to another’s work or ideas/concepts.

Meet and succeed in each of the varied assessments presented.

Assessment Type | Duration | Method | Topic | Schedule | Weighting
--- | --- | --- | --- | --- | ---
Assessment E | 10 weeks | efficacy of individual PDP | Attendance and participation in PDP | NA | 10%
Assessment A | Nine (9) weeks | research project (1,500 – 2000 words) | Computing/engineering /biological or biomedical/environmen t studies | Set session 2.2 Submission session 11.1 | 30%
Assessment B | 1 session (1 hour) | Listening assessment | Listen to a lecture (computing/engineering /biological or biomedical/environmen | Session 10.2 | 10%
| Assessment C | Individual presentation | 1 session | Presentation | Project presentation and defence | Session 11.2 | 20% |
| Assessment D | Final Examination | Two (2) hour (closed-book) examination | Examination | Final summative examination covering academic reading and writing skills; history of scholarship and academic debate and critical analysis | Week 13 | 30% |

**Total Weighting**

100%

**Standard Progression Criteria**

For the purposes of PUIC this module carries a standard minimum progression requirement: [grade C*/pass mark 65%].

For Plymouth University this is a Pass/Fail zero credited module that the student must pass to progress into University Stage 2.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Classification</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>A*</td>
<td>High Distinction</td>
<td>80% – 100%</td>
</tr>
<tr>
<td>B*</td>
<td>Distinction</td>
<td>70% – 79%</td>
</tr>
<tr>
<td>C*</td>
<td>Pass</td>
<td>65% – 69%</td>
</tr>
<tr>
<td>F</td>
<td>Fail</td>
<td>Less than 65%</td>
</tr>
</tbody>
</table>

**Bibliographic Resources**

**Essential Reading**


**Recommended Reading**


**Further Sources**

**Journals (general reading)**

- Asian Journal of Communication
- Communication Education
- Journal of Communication
- Relevant computing/engineering/biological or biomedical/environment journals – supplied as focus by Instructor