ENVIRONMENTAL
HEALTH AUSTRALIA

Environmental Health Course Accreditation Policy

June 2014

Revised December 2019

EHA Policy Number: **EHANP - 2014 - 05**
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Version	Notes
November 2006	The Australian Institute of Environmental Health (now known as Environmental Health Australia) Course Accreditation Policy was originally adopted by the national Board of Directors on November 1, 2006.
March 2011	The March 2011 version of the policy reflects the operations of EHA following restructuring in early 2010.
September 2013	In 2012 enHealth and EHA undertook a joint project to review the environmental health course accreditation framework. This policy has been reviewed to align with the enHealth 'Environmental Health Officer Skills and Knowledge Matrix' in accordance with the project recommendations.
Revised October 2014	The EHA National Board set the accreditation fee at $3,500. It was agreed that all associated costs for the National Accreditation Project Officer would be included in the accreditation fee.
Revised December 2014	The EHA National Board agreed to an amendment at Section 6.5 in relation to "new courses".
Revised April 2018	Course accreditation fee was reviewed and increased to $5,000 (GST exc).
Revised December 2019	Underpinning skills and knowledge framework streamlined.

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2013 version

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Contents

1. Purpose

The purpose of this policy is to provide educational institutions in Australia with information on Environmental Health Australia's (EHA's) environmental health course accreditation policy and process. These accreditation guidelines are for universities providing environmental health courses designed to produce graduates who practice as Environmental Health Officers (EHOs).

2. Background

2.1. Environmental health course accreditation

EHA supports entry into the environmental health field through the Higher Education Sector. This policy describes how this can be achieved either through undergraduate or postgraduate courses of study. In the higher education sector, universities set objectives and academic requirements for programs/courses having regard to advice from relevant professional bodies, employer groups, and from peer review processes. The accreditation policy and processes detailed in this document are designed to support universities develop and/or maintain comprehensive environmental health courses which meet industry needs and compliment university processes.

EHA developed its original environmental health course accreditation policy in 2006 based on best practice at the time and has subsequently amended the policy to reflect organisational changes and changes in the university sector (e.g. the introduction of post-graduate environmental health courses). In 2009 enHealth released the national 'Environmental Health Officer Skills and Knowledge Matrix' as a benchmark for the minimum level of skills and knowledge required by a competent Environmental Health Officer (EHO). EHA has recognised the need for its accreditation policy to be updated so that it is consistent with the enHealth matrix. EHA and enHealth undertook a joint project in 2012 to review the environmental health course accreditation requirements with a goal of ensuring future accreditation requirements are consistent with the enHealth matrix and continually improving the accreditation process. This version of the EHA environmental health course accreditation policy incorporates the recommendations resulting from the EHA/enHealth project.

This policy outlines the skills and knowledge universities must demonstrate are being developed through their environmental health course prior to it being accredited. Fields in which graduates will apply their skills and knowledge are also identified. The approach taken in this policy is consistent with the implementation of Outcomes Based Education (OBE) in Australian universities.

Further information on EHA accredited courses and membership is accessible through EHA's website: www.eh.org.au.

2.2. enHealth 'Environmental Health Officer Skills and Knowledge Matrix'

The enHealth matrix is set out in three parts. Part 1 refers to generic transferable outcomes aligned to those used in the Australian Qualifications Framework (AQF) for all education and training sectors. Part 2 describes eight areas of underpinning skills and knowledge: science; public and environmental health concepts; research methods; political, legislative, policy context; risk assessment and management; compliance and enforcement; communication, cultural awareness and interpersonal skills; and administration and management. Part 3 of the matrix describes nine applied work-related areas of skills and knowledge: safe and suitable food; prevention and control of notifiable and communicable conditions;

water management; environmental management; land use management; built environment; Indigenous environmental health; sustainability and climate change; and emergency management.

2.3. Australian Qualifications Framework

The Australian Qualifications Framework (AQF) is the national policy for defining qualification levels attained through the Australian education and training sector and encompasses higher education, vocational education and training, and schools (AQF, 2013). The AQF sets out characteristics of learning outcomes for each qualification level and takes a taxonomic approach to describing qualifications and the differences between these qualification types (see section 3.1 of this document for further information).

2.4. Role of environmental health university education

EHA recognises that students undertake university education to fulfil a range of professional goals. The main motivations for undertaking university education in environmental health are identified as:

1. Having an interest in Environmental Health: persons interested in environmental health but who do not want to practice as an 'Environmental Health Officer' (EHO), may choose to study a range of environmental health subjects/units (e.g. undertake a 'minor') as part of a broader health program, e.g. Master of Public Health degree;

2. Professional Development for non-EHOs: for persons who work in or are trained in a closely aligned field and want to enhance their skills in environmental health. This form of postgraduate education may provide generic or specialist training in environmental health that builds on the existing professional specialty of the person (e.g. could be an architect who predominantly works in sustainable urban design, or could be someone involved in air pollution monitoring/research);

3. Professional Development for EHOs: practising EHOs may wish to undertake professional development in specific environmental health/technical areas (e.g. risk assessment), in management (e.g. MBA), or in research (e.g. PhD); and

4. Wanting to become an EHO: for people who want to become an EHO. The role of an accredited environmental health course is to provide training to enable the graduate to practice as an EHO. This undergraduate or postgraduate education provides an entry pathway into the profession.

This policy focuses on environmental health university courses that are designed to provide training to practice as an EHO (i.e. only option 4 above). Even though the other purposes/roles of university education in environmental health are acknowledged as playing an important role in the training and development of the environmental health workforce, they are currently outside of the scope of this accreditation policy.

3. EHA Environmental Health University Program Accreditation Framework

The following section of the policy describes the EHA Environmental Health University Program Accreditation Framework (EHUPAF). The requirements of the EHUPAF provide the foundation for the education of Environmental Health Officers (EHOs) and other environmental health professionals. Universities are required to map their program against the underpinning skills and knowledge listed in section 3.2.1 and demonstrate that desired graduate attributes and capabilities are developed (e.g. providing evidence of AQF compliance demonstrates the attributes and capabilities listed in the AQF are developed at the required level).

This policy recognises that the requirements of the EHUPAF can be met through either undergraduate or postgraduate education pathways. In regard to the undergraduate education pathway, this policy recognises that all or most of the required capabilities will have been obtained from that program and thus the undergraduate program alone is charged with providing the skills base for that graduate including any component of professional practice. Where the graduate has obtained their qualification to practice through the postgraduate education pathway, it is recognised that the graduate will have obtained capabilities not only from the program being accredited, but also from their previous undergraduate program and any employment experience they have. The accreditation process will reflect this and assess the combination of the postgraduate offering and the entrance requirements to that program to ensure that the graduates will be equipped with the required attributes, capabilities, skills and knowledge to become a competent EHO.

Inherent in the EHUPAF is recognition of the significant role EHOs have in protecting the community through the effective administration and enforcement of public health and environment legislation. As such, there is an expectation that all graduates from EHA accredited courses will be eligible for appointment as an 'authorised person' under the relevant legislation. Therefore, all EHA accredited courses should provide appropriate training to enable their graduates to meet the criteria for appointment under relevant legislation in the state in which the university is based.

3.1. Graduate attributes and capabilities

It is recognised by the profession and EHA that university trained graduates from all disciplines should have a range of generic attributes and capabilities which translate to any profession. Such attributes and capabilities are detailed in the AQF.

The AQF defines four broad categories of generic learning outcomes which relate to transferable skills.

- Fundamental skills, such as literacy and numeracy appropriate to the level and qualification type.
- People skills, such as working with others and communication skills.
- Thinking skills, such as learning to learn, decision making and problem solving.
- Personal skills, such as self-direction and acting with integrity. (AQF 2013, p.11)

Learning outcomes are also provided for each AQF level of qualification. A Bachelor Degree is AQF Level 7, Graduate Diploma is AQF Level 8 and Master Degrees are AQF Level 9. The AQF generic learning outcomes criteria and summary for each of these AQF levels are shown in Appendix 1, along with desirable attributes and abilities of environmental health graduates identified by EHA.

To avoid duplication and potential inconsistencies, matters covered by the AQF will not be repeated in this policy. However, universities will have to prove AQF compliance during the accreditation process.

3.2. Environmental health skills, knowledge and applications

Graduates of EHA accredited courses require extensive specialised knowledge and skills in order to be able to practice as competent EHOs. The skills and knowledge identified in this section align with the content of the 'enHealth Environmental Health Officer Skills and Knowledge Matrix' (enHealth 2009).

3.2.1. Underpinning skills and knowledge

The underpinning skills and knowledge required by all environmental health graduates are listed in table 1. These skills and knowledge form the accreditation criteria for environmental health courses and universities must demonstrate how each criterion is being met before their course will be accredited.

Table 1: Underpinning skills and knowledge

Reference	Accreditation requirement
Communication	
C1	Knowledge of written and verbal communication techniques and strategies suitable for diverse audiences, purposes and contexts.
C2	Knowledge of strategies to build collaboration, work in teams, mediate, educate, advocate, and influence outcomes and deal with difficult situations.
C3	Basic principles of reflective practice and self-development for effective communication.
Environmental health risk assessment and management	
E1	Understanding of the core principles, frameworks for and procedures involved in risk assessment for environmental health contexts.
E2	Critical evaluation of evidence underpinning environmental health risk assessment.
E3	Introduction to risk management principles and evaluation of risk management options.
Law, governance and policy	
L1	Introduction to legislative frameworks for environmental health.
L2	Introduction to the law making process and factors that influence policy and legislation.
L3	Knowledge of how to interpret legislation.
L4	Knowledge of public and environmental health legislation.
L5	Introduction to development assessment processes.
L6	Introduction to administrative law (e.g. public sector record keeping requirements, privacy laws, freedom of information/right to information, disclosure, mandatory reporting).
L7	Introduction to grounds for internal and external reviews, appeals, etc.
L8	Overview to workplace laws (e.g. anti-discrimination, anti-harassment, work health and safety).
L9	Knowledge of legal authority and requirements to act in accordance with the purpose of legislation and ethical standards for authorised persons/officers (e.g. duty of care, confidentiality, powers of entry).
L10	Knowledge of compliance options (legislative and non-legislative) including their strengths, limitations and legislative requirements.
L11	Introduction to interviewing, investigation and risk-based inspection techniques, prosecution processes, court procedures, etc.
L12	Introduction to enforcement guidelines/policies/protocols.
L13	Introduction to governance principles and strategies, ethics and decision making.
L14	Overview of the jurisdiction and role of agencies relevant to environmental health in all tiers of government.
L15	Introduction to key government strategies and intergovernmental agreements in the context of environmental health.
L16	Introduction to policy and program development and evaluation techniques.

Reference	Accreditation requirement
L17	Knowledge of criteria and general procedures for assessing, approving, determining conditions and licences, notices, orders and fines.
Management and administration	
M1	Introduction to decision support tools (e.g. risk analysis, cost-benefit analysis, etc.).
M2	Introduction to project planning and management.
M3	~~Introduction to strategic and operational planning~~. (Merged with M2)
M4	Introduction to key government protocols in the context of environmental health.
Public health and sustainability principles	
P1	Understanding of determinants of health and socio-ecological models of health.
P2	Introduction to population/public health and health promotion principles, theories, strategies, frameworks and tools.
P3	~~Introduction to linkages between environment and health.~~ (merged with P4)
P4	Introduction to linkages between environment and health policies and programs.
P5	Understanding the construct and principles of sustainability.
P6	Introduction to environmental and health impact assessment.
P7	Introduction to and the understanding of environmental health objectives, values, principles and risks and how they are embedded in relevant legislation.
P8	Introduction to how environmental health principles are applied in policy development and decision making.
P9	Introduction to the impact of development on environmental health.
Research and critical thinking skills	
R1	Introduction to qualitative and quantitative research methods covering research design principles and strategies, research ethics, methods of data collection and analysis to support evidence-based decision-making in environmental and public health.
R2	Introduction to epidemiology and biostatistics to facilitate the critical evaluation of public health evidence.
R3	Basic principles and techniques of sampling for environmental health purposes (e.g. environmental sampling, food sampling), including quality assurance.
R4	Introduction to procedures for investigating environmental health incidents including disease outbreak investigations and pollution events.
R5	Problem solving using systems thinking and critical judgement.
Science	
S1	Introduction to principles of physics as a basis for understanding physical hazards and noise.
S2	Basic principles of biology.
S3	Introduction to human anatomy and physiology as a basis for understanding disease causation and exposure pathways.
S4	Basic principles of microbiology.
S5	Knowledge of microorganisms of significance for human health.
S6	Basic principles of chemistry.
S7	Basic principles of ecology.
S8	Basic principles of environmental science.

Reference	Accreditation requirement
S9	Introduction to atmospheric sciences as a basis for understanding environmental change, pollutant and vector dispersal.
S10	Introduction to toxicology as a basis for environmental health risk assessment.
S11	Introduction to pest management and entomology as a basis for understanding vectors of disease.
S12	Introduction to treatment and monitoring technologies e.g. wastewater treatment, air pollution control, etc.
S13	Introduction to hazardous materials used in construction (e.g. asbestos).
S14	Introduction interpreting building and engineering plans (e.g. building permits, development approvals).

To assist universities prepare for the accreditation process a template is provided in Appendix 2 and an example of how underpinning skills and knowledge can be mapped to applied areas is provided in Appendix 3.

3.2.2. Applied areas

Part 3 of the enHealth 'Environmental Health Officer Skills and Knowledge Matrix' describes the following nine applied work-related areas of skills and knowledge:

- safe and suitable food;
- prevention and control of notifiable and communicable conditions;
- water management;
- environmental management;
- land use management;
- built environment;
- Indigenous environmental health;
- sustainability and climate change; and
- emergency management.

Universities must demonstrate how they are preparing their graduates to apply the underpinning skills and knowledge in the applied areas.

3.3. Linking underlying skills and knowledge and applied areas to develop environmental health professionals

There are a number of ways in which programs of study can ensure that their graduates attain the attributes, capabilities, skills and knowledge which EHA accreditation requires and also cover the applied areas and contextual background necessary for accreditation. Selection of an appropriate route to achieve this objective is left to the course organisers, provided they can demonstrate to the satisfaction of the Accreditation Panel that their program will achieve the required outcomes.

4. Environmental health university programs

This section provides an overview of environmental health university program requirements including assessment, work integrated learning (WIL), quality, staffing and resources. Additional guidelines for postgraduate environmental health courses are also provided.

4.1. General requirements

In addition to benchmarking/alignment of the environmental health university program with the EHUPAF, the following general requirements from the AQF (2013) also apply.

Table 2: General AQF requirements for courses

Requirements	Bachelor Degree (AQF level 7)	Graduate Diploma (AQF level 8)	Masters Degree (AQF level 9)
Entry level	Entry to the program is subject to the entry requirements of the individual University.	Entry to the program is subject to the entry requirements of the individual University. However, at a minimum this is to be successful completion of an appropriate 3 year undergraduate degree. Some universities may choose to apply entry requirements in regard to content (e.g. a minimum level of basic science) or a minimum level of work experience.	
Course length	Typically 3-4 years full-time (or part-time equivalent).	Typically 1-2 years full-time (or part-time equivalent).	Typically 1 – 2 years full-time (or part-time equivalent). 1.5 years following a level 7 qualification in the same discipline. 1 year following a level 8 qualification in the same discipline. 2 years following a level 7 qualification in a different discipline. 1.5 years following a level 8 qualification in a different discipline.

4.2. Subject/Unit Outlines

Universities are expected to define the learning outcomes for each subject/unit (including electives) in the subject/unit outline and implement assessment programs that assess these outcomes. Copies of the subject/unit outlines are to be provided to the Course Accreditation Committee.

4.3. Assessment

In their accreditation application, universities will need to demonstrate how summative and formative assessment confirms the attainment of learning objectives and links to the underpinning skills and

knowledge. Where assessment items are graded, the grading process must be designed to ensure that graduates will attain the required skills and knowledge as detailed in the underpinning skills and knowledge.

4.4. Work Integrated Learning

When applying for accreditation, each university must outline their approach to creating work readiness in their graduates.

Work integrated learning (WIL) includes a range of strategies designed to apply theoretical learning to a practical context and therefore plays a key role in making graduates 'work ready'. The range of WIL strategies are discussed below.

> Structured work placement is one option on a continuum of WIL strategies designed to strengthen the connections between learning and practice. Other examples include, but are not limited to, workplace visits, practical or problem based project work, investigative assignments, laboratory activities and work experience. The common aim of these activities is to provide authentic opportunities and environments where the learner draws on theoretical knowledge to build practical knowledge and skills in real or authentic simulated work environments. (Windsor & Associates 2012, p.7)

It is noted that:

> There is strong support for well managed work placement. However it is also acknowledged that in some cases this is difficult to arrange and manage. Under this framework accreditation criteria will require applicants to provide significant opportunities for professional and workplace exposure and for practical, hands-on learning. Where strategies include the use of simulated or scenario-based learning environments it will be up to the panel members to assess the authenticity of these learning activities. The learning outcomes associated with these activities need to be assessed and mapped to show how they contribute to overall learning outcomes. (Windsor & Associates 2012, p.7)

To support students to gain practical skills and knowledge, it is recommended that a practicum of six weeks (or equivalent part-time) or more be integrated into programs when possible. The duration and type of work experience relevant for each student should be based on their level of previous experience in relevant environmental health professions.

It is acknowledged that many students undertaking postgraduate study have either worked or are currently working in a professional environment and therefore may have previous experience that assists with their 'work readiness'. Work commitments of post graduate students may also limit their ability to undertake six weeks of work experience in one year (i.e. the duration of most Graduate Diploma programs).

In some States (e.g. Western Australia) a specific requirement exists regarding completion of a prescribed period of practicum within the environmental health program in order for approval to practice as an EHO to be granted. In such cases, education providers may choose to define a course of study which includes within it a significant practical experience component.

4.5. Quality

As part of the accreditation process applicants will be required to outline the quality assurance and program evaluation mechanisms used in their university. This includes the regular input and involvement in reviewing program content and delivery.

4.6. Staffing and resources

Universities are expected to demonstrate adequate numbers of and appropriately qualified staff to deliver their environmental health program. The academic staff member responsible for coordinating the accredited environmental health program should hold accredited qualifications in environmental health (or equivalent as recognised by EHA) and be eligible for membership of EHA.

In addition, universities should demonstrate adequate resources and facilities to deliver their environmental health program.

4.7. Additional guidelines for postgraduate courses

Capabilities of post-graduate students should be considered as being achieved through the combination of both their undergraduate and postgraduate education.

The following elements are considered as being foundational for achieving the EHUPAF graduate capabilities through a postgraduate education pathway:

- As environmental health is an applied science discipline, postgraduate education should build upon a minimum level of competence in foundation sciences.
- The capabilities that all undergraduate degree graduates hold are recognised and should not necessarily be reiterated in the postgraduate training – the purpose of the postgraduate education is to build upon these existing capabilities.
- The undertaking of a workplace practicum/practical work experience in environmental health is highly recommended for postgraduate students to allow for the consolidation of theoretical knowledge through practical experience and to also assist with the study-to-work (or change of career) transition.

Given these fundamental elements, it is considered that postgraduate education programs in environmental health which have been devised to provide a qualification to practice as an EHO should focus on the underpinning skills and knowledge identified in section 3.2.1 of the EHUPAF, with many of the generic graduate attributes and capabilities having been primarily gained through appropriate undergraduate education. To illustrate how this combination can be obtained, the following example is considered to align with the EHUPAF:

- Completion of a *Graduate Diploma in Environmental Health* or similar qualification that has as its purpose the training of graduates to practice as EHOs, plus completion of an appropriate undergraduate degree (generally in the science or health fields) through which a minimum level of basic science training has been undertaken (e.g. one semester full-time equivalent of units/subjects such as chemistry, physics, biology, anatomy and physiology, life science, microbiology). Institutions offering this type of postgraduate program will therefore be required to ensure that appropriate entrance requirements are maintained and that all underpinning skills

and knowledge can be met through the combination of the program entry requirements and course content.

Where a potential entrant to this type of postgraduate program does not have the requisite training at undergraduate level in the basic sciences, they should be required to gain the appropriate knowledge base through a 'bridging' program or similar prior to commencing the postgraduate qualification. The mechanism through which this is offered will vary among educational institutions, but the endpoint of entry to the postgraduate program must ensure that all entrants have a basic grounding in sciences.

5. EHA Accreditation Committee and Panels

The role and composition of the EHA Accreditation Committee and accreditation panels is discussed in this section.

5.1. Accreditation Committee

EHA will establish an Accreditation Committee to provide independent advice to the board of directors and to oversee the accreditation processes. The Accreditation Committee will:

- Implement the EHA Environmental Health Course Accreditation Policy and report to the Board on current course accreditation activities;
- Receive and consider information and advice from stakeholders;
- Receive applications for accreditation and manage the accreditation process;
- Coordinate regular reviews of the policy to ensure its timeliness.

The Accreditation Committee will include:

- Two representatives of the EHA board of directors (chair and deputy chair);
- Two representatives of EHA accredited university courses;
- Two representatives of employers (i.e. one state government representative and one local government representative); and
- An enHealth representative.

Whilst it is desirable to have maximum representation, one person may fulfil more than one of these roles if necessary and appropriate.

5.2. Accreditation Panels

EHA will recruit and induct a pool of potential course accreditation panel members. The Accreditation Committee will appoint panel members from this pool for each accreditation assessment process.

The role of an accreditation panel is to assess the university's application and other evidence against the requirements of this policy (particularly the underpinning skills and knowledge listed in section 3.2.1) to determine if the environmental health course is suitable for accreditation by EHA.

The Accreditation Panel will consist of a chairperson (a representative of EHA), an experienced environmental health academic from a university located in another State or Territory, two experienced environmental health professionals (i.e. one from local government and one from the department of health in the relevant state/territory) and other representatives of other bodies as determined by the Accreditation Committee (e.g. representatives from State agencies that have specific appointment

processes for EHOs such as the Western Australian Environmental Health Officers Professional Review Board).

The university applying for accreditation will be consulted regarding the accreditation panel composition.

6. Accreditation Process Guide

This section outlines the EHA accreditation process.

6.1. Funding

The university applying for accreditation will be responsible for funding the travel and accommodation costs of the accreditation panel members for any on-site visits.

6.2. Accreditation Fee

A Course Accreditation Fee of $5,500 (GST inc)[1]*[2] will apply to recover administrative and marketing costs. The fee will go to the maintenance of the course accreditation processes (e.g. the induction of panel members) and of the web site to include information regarding the course accreditation program. All accredited universities will be featured on this site along with hyperlinks back to the universities own web site.

** Note: EHA reserves the right to review the accreditation fee depending on specific circumstances of each individual university. A reduced fee (to recover administrative costs) will be applied for any university that does not receive either Full or Provisional Accreditation. If this university subsequently reapplies for accreditation, the standard fee will be applied. In the case of courses which receive Provisional Accreditation, a reduced fee (to recover administrative costs) will be applied for undertaking the Stage 2 assessment (refer to section 7). The accreditation fee includes all associated costs for the National Accreditation Project Officer.[3]*

6.3. Accreditation Period

The maximum period for gaining accreditation for an EHA accredited environmental health course is five (5) years. After this time, the university will need to apply for re-accreditation.

6.4. Significant change

If the structure or curriculum of an accredited course changes during their period of accreditation, the university is to immediately notify EHA so that the impact of these changes can be assessed to ensure that the course accreditation status can be maintained. If significant changes have occurred the university may be required to apply for re-accreditation.

6.5. Accreditation Process

If a "new course" incorporates the majority of units from a previously accredited course and meets all criteria as detailed in this policy, then full accreditation may be granted for the duration of the currently

[1] The course accreditation fee was increased in 2018 as a cost recovery for the policy review.
[2] *The Course Accreditation fee was set at $3,500 by the EHA National Board on 14 October 2014.
[3] The EHA National Board agreed that the accreditation fee will include all associated costs for the National Accreditation Project Officer.

accredited course. The accreditation of "new courses" will be assessed on a case-by-case basis. The Board of EHA will resolve all decisions in relation to "new courses", in the first instance.[4]

Appendix 4 and Appendix 5 contain further guidance on the accreditation process.

7. Provisional Accreditation Process Guide

EHA recognises that universities developing a new environmental health course will require specific guidance and assistance. As such the Provisional Accreditation process involves two stages – provisional accreditation and full course accreditation.

Stage 1 – Provisional accreditation

- Universities may apply for Provisional Accreditation once the curriculum design for an environmental health program has been established.
- Application for Provisional Accreditation follows the same process as the EHA Course Accreditation with the university submitting an application which includes the mapping of course content against the requirements of this policy. An on-site assessment of the course and university will be conducted by the accreditation panel.
- Should provisional accreditation be granted, EHA will issue a formal letter of recognition and once the university agrees to any conditions it can state that the program has been granted provisional accreditation and may use the term "Provisionally Accredited Course" in their marketing materials.
- The duration of the Provisional Accreditation is determined by the course development schedule of the university.

Stage 2 – Full accreditation

- A university may apply for full accreditation once it has produced at least one cohort of graduates and demonstrates that it meets the requirements of the accreditation policy.
- A revised mapping document highlighting any program amendments must be submitted.
- The Accreditation Panel will assess the course in its entirety and recommendation for Accreditation will be made in the usual manner.

8. Right of appeal

Any university affected by a decision made under this policy has a right of appeal. Examples of decisions include:

- A decision to not accredit an environmental health course.
- A decision to not grant provisional accreditation for an environmental health course.

[4] The EHA National Board endorsed the inclusion of "new courses" in section 6.5 on 12 December 2014.

- A decision to require an application for re-accreditation following significant changes to an accredited program.

An appeal application must be submitted to EHA within two months of the university being notified of EHA's decision. The appeal application must be in writing and must clearly explain the decision that is the subject of the appeal, the reasons why the university disagrees with the decision and any other relevant information.

Any appeals will be considered by the Review Panel. Members of the review panel will not have had any previous involvement in the relevant accreditation process, e.g. they will not have been involved in the accreditation panel or assessment of the accreditation application, and they will not be involved in the Accreditation Committee. The Review Panel consists of three members – an EHA representative, an enHealth representative and a representative of an independent professional association involved in course accreditation processes.

The Review Panel will independently review the relevant decision. When reviewing the decision the panel will have regard to all information provided by the relevant university and all relevant EHA documentation. The panel may also interview relevant parties to gain more information if necessary.

The Review Panel will provide a report to the EHA Board of Directors outlining the appeal process, key information and a determination in relation to the original decision. The EHA Board of Directors must consider the report and advise the relevant university of the outcome of the appeal process.

A fee of $TBA will apply to all appeal applications and is to be paid by the university at the time the appeal application is lodged with EHA. This fee will be refunded if the original decision of EHA is overturned.

9. Policy Review

The EHA Accreditation Committee is responsible for ensuring this policy is reviewed regularly. The chair of the committee is to advise the EHA Board of Directors when it is necessary to review the policy, required amendments, etc.

A major review of the policy is to be undertaken every 5 years to ensure it continues to reflect best practice. A review will also be scheduled 12 months after significant amendments to the policy to ensure that the policy is continuing to achieve the intended outcomes. Additional reviews may occur as needed (e.g. if significant changes to AQF occur, the release of key EHO workforce documents).

Appendix 1: Graduate attributes and capabilities

To avoid duplication and potential inconsistencies, matters covered in this Appendix will not be repeated in this policy or considered in detail during the accreditation process. However, universities will have to prove AQF compliance during the accreditation process.

Table 3: AQF level summaries and generic learning outcomes criteria

	Bachelor Degree (AQF level 7)	Graduate Diploma (AQF level 8)	Master Degree (AQF level 9)
Summary	Graduates at this level will have broad and coherent knowledge and skills for professional work and/or further learning	Graduates at this level will have advanced knowledge and skills for professional/highly skilled work and/or further learning	Graduates at this level will have specialised knowledge and skills for research, and/or professional practice and/or further learning
Knowledge	Graduates at this level will have broad and coherent theoretical and technical knowledge with depth in one or more disciplines or areas of practice	Graduates at this level will have advanced theoretical and technical knowledge in one or more disciplines or areas of practice	Graduates at this level will have advanced and integrated understanding of a complex body of knowledge in one or more disciplines or areas of practice
Skills	Graduates at this level will have well-developed cognitive, technical and communication skills to select and apply methods and technologies to: • analyse and evaluate information to complete a range of activities • analyse, generate and transmit solutions to unpredictable and sometimes complex problems • transmit knowledge, skills and ideas to others	Graduates at this level will have advanced cognitive, technical and communication skills to select and apply methods and technologies to: • analyse critically, evaluate and transform information to complete a range of activities • analyse, generate and transmit solutions to complex problems • transmit knowledge, skills and ideas to others	Graduates at this level will have expert, specialised cognitive and technical skills in a body of knowledge or practice to independently: • analyse critically, reflect on and synthesise complex information, problems, concepts and theories • research and apply established theories to a body of knowledge or practice • interpret and transmit knowledge, skills and ideas to specialist and non-specialist audiences
Application of knowledge and skills	Graduates at this level will apply knowledge and skills to demonstrate autonomy, well-developed judgement and responsibility: • in contexts that require self-directed work and learning	Graduates at this level will apply knowledge and skills to demonstrate autonomy, well-developed judgement, adaptability and responsibility as a practitioner or learner	Graduates at this level will apply knowledge and skills to demonstrate autonomy, expert judgement, adaptability and responsibility as a practitioner or learner

	• within broad parameters to provide specialist advice and functions		

(Source: The Australian Qualifications Framework Council 2013)

After consideration of AQF generic learning outcomes the enHealth (2009) matrix highlights the attributes of importance as:

- The acquisition of a systematic and coherent body of knowledge, the underlying principles and concepts, and the associated communication and problem-solving skills
- Development of the academic skills and attributes necessary to undertake research, comprehend and evaluate new information, concepts and evidence from a range of sources
- Development of the ability to review, consolidate, extend and apply the knowledge and techniques learnt, including in a professional context
- A foundation for self-directed and lifelong learning
- Interpersonal and teamwork skills appropriate to employment and/or further study

Prior to the development of the AQF, generic attributes and specific abilities that environmental health graduates needed were identified and listed in the 2011 version of this policy. These generic attributes and specific abilities were expressed in practical terms and continue to be worthy of consideration by universities developing/reviewing environmental health courses and have therefore been provided in table 4.

Table 4: Generic attributes and specific abilities of environmental health graduates.

Generic attributes of environmental health graduates	Targeted specific abilities of graduates of EHA accredited environmental health courses
Apply relevant knowledge, principles and concepts to workplace needs	• apply basic public health science principles and concepts to issues of concern • understand the discipline of environmental health, its theoretical underpinnings and spheres of operation • use quantitative and qualitative methods for monitoring, assessing and evaluating events
Communicate effectively	• exchange of information with colleagues, practitioners, clients, policy-makers, interest groups and the public • have appropriate interpersonal skills • facilitate conflict resolution within agencies, community and regulated parties • persuasively argue for the value and importance of environmental and public health
Access, evaluate and synthesise information	• identify and access information sources and compile relevant and appropriate information when needed • analyse data, recognise meaningful test results, and interpret results • evaluate the effectiveness, performance or results of procedures, interventions and programs
Are committed to lifelong learning (utilise lifelong learning skills)	• responsible for making change • adapt effectively to change

	• take responsibility for their own learning and development. • critically evaluate personal beliefs and assumptions
Demonstrate international and cultural awareness and understanding	• recognise individual and collective human rights • recognise the importance of cultural diversity and sensitivity • think globally
Apply professional skills	• work independently and in teams • demonstrate leadership • understand and demonstrate professional behaviour • demonstrate ethical practices • employ systems-thinking skills
Use technologies appropriately	• learn to use new technologies • decide on appropriate applications, recognising their advantages and limitations
Think critically, creatively and reflectively	• apply logical and rational processes to analyse the components of an issue • think creatively to generate innovative solutions • undertake systematic problem-solving • employ principles of project management

Oosthuizen (2009) noted the following similarities and gaps between the EHA and enHealth generic attributes.

Table 5: EHA and enHealth generic attributes (similarities)

EHA Generic attributes	enHealth generic attributes
Apply relevant knowledge, principles and concepts to workplace needs	Acquisition of a systematic coherent body of knowledge, the underlying principles and concepts …
Communicate effectively	…and the associated communication and problem solving skills.
Access, evaluate and synthesise information	Development of the academic skills and attributes necessary to undertake research, comprehend and evaluate new information, concepts and evidence from a range of sources.
Committed to lifelong learning	Foundation for self-directed, lifelong learning
Apply professional skills	Development of the ability to review, consolidate, extend and apply the knowledge and techniques learnt, including in a professional context.

Table 6: EHA and enHealth generic attributes (gaps)

EHA Generic attributes	enHealth generic attributes
Use technologies appropriately	
Think critically, creatively and reflectively	
Demonstrate international and cultural awareness and understanding	
	Interpersonal and teamwork skills appropriate to employment and/or further study

Appendix 2: Underpinning skills and knowledge mapping template

The table below illustrates one method of determining whether a course is meeting the needs of the profession by mapping the underpinning skills and knowledge of its future graduates (taken from section 3.2.1 of the policy) to ways in which knowledge and skills learned, practiced and assessed, and the integration of the context or applied area.

Table 7: Example template to assist universities map course content. (amended 2019)

Underpinning skills and knowledge	**Ways in which knowledge and skills are developed in the program** (These columns are to be completed by universities to map how their program demonstrates the underpinning skills and knowledge).		
	Unit/subject	**Depth** (e.g. introductory, in depth, advanced)	**Details** (i.e. teaching, practice, assessment, WIL, etc.)
C1: Knowledge of written and verbal communication techniques and strategies suitable for diverse audiences, purposes and contexts.			
C2: Knowledge of strategies to build collaboration, work in teams, mediate, educate, advocate, and influence outcomes and deal with difficult situations.			
C3: Basic principles of reflective practice and self-development for effective communication.			
E1: Understanding of the core principles, frameworks for and procedures involved in risk assessment for environmental health contexts.			

E2: Critical evaluation of evidence underpinning environmental health risk assessment.			
E3: Introduction to risk management principles and evaluation of risk management options.			
L1: Introduction to legislative frameworks for environmental health.			
L2: Introduction to the law making process and factors that influence policy and legislation.			
L3: Knowledge of how to interpret legislation.			
L4: Knowledge of public and environmental health legislation.			
L5: Introduction to development assessment processes.			
L6: Introduction to administrative law (e.g. public sector record keeping requirements, privacy laws, freedom of information/right to information, disclosure, mandatory reporting).			
L7: Introduction to grounds for internal and external reviews, appeals, etc.			
L8: Overview to workplace laws (e.g. anti-discrimination, anti-harassment, work health and safety).			

L9: Knowledge of legal authority and requirements to act in accordance with the purpose of legislation and ethical standards for authorised persons/officers (e.g. duty of care, confidentiality, powers of entry).			
L10: Knowledge of compliance options (legislative and non-legislative) including their strengths, limitations and legislative requirements.			
L11: Introduction to interviewing, investigation and risk-based inspection techniques, prosecution processes, court procedures, etc.			
L12: Introduction to enforcement guidelines/policies/protocols.			
L13: Introduction to governance principles and strategies, ethics and decision making.			
L14: Overview of the jurisdiction and role of agencies relevant to environmental health in all tiers of government.			
L15: Introduction to key government strategies and intergovernmental agreements in the context of environmental health.			

L16: Introduction to policy and program development and evaluation techniques.			
L17: Knowledge of criteria and general procedures for assessing, approving, determining conditions and licences, notices, orders and fines.			
M1: Introduction to decision support tools (e.g. risk analysis, cost-benefit analysis, etc.).			
M2: Introduction to project planning and management.			
M3: (Merged with M2)			
M4: Introduction to key government protocols in the context of environmental health.			
P1: Understanding of determinants of health and socio-ecological models of health.			
P2: Introduction to population/ public health and health promotion principles, theories, strategies, frameworks and tools.			
P3: (Merged with P4)			
P4: Introduction to linkages between environment and health demonstrated through health policies and programs.			

P5: Understanding the construct and principles of sustainability.			
P6: Introduction to environmental and health impact assessment.			
P7: Introduction to and the understanding of environmental health objectives, values, principles and risks and how they are embedded in relevant legislation.			
P8: Introduction to how environmental health principles are applied in policy development and decision making.			
P9: Introduction to the impact of development on environmental health.			
R1: Introduction to qualitative and quantitative research methods covering research design principles and strategies, research ethics, methods of data collection and analysis to support evidence-based decision-making in environmental and public health.			
R2: Introduction to epidemiology and biostatistics to facilitate the critical evaluation of public health evidence.			

R3: Basic principles and techniques of sampling for environmental health purposes (e.g. environmental sampling, food sampling), including quality assurance.			
R4: Introduction to procedures for investigating environmental health incidents including disease outbreak investigations and pollution events.			
R5: Problem solving using systems thinking and critical judgement.			
S1: Introduction to principles of physics as a basis for understanding physical hazards and noise.			
S2: Basic principles of biology.			
S3: Introduction to human anatomy and physiology as a basis for understanding disease causation and exposure pathways.			
S4: Basic principles of microbiology.			
S5: Knowledge of microorganisms of significance for human health.			
S6: Basic principles of chemistry.			
S7: Basic principles of ecology.			
S8: Basic principles of environmental science.			

S9: Introduction to atmospheric sciences as a basis for understanding environmental change, pollutant and vector dispersal.			
S10: Introduction to toxicology as a basis for environmental health risk assessment.			
S11: Introduction to pest management and entomology as a basis for understanding vectors of disease.			
S12: Introduction to treatment and monitoring technologies e.g. wastewater treatment, air pollution control, etc.			
S13: Introduction to hazardous materials used in construction (e.g. asbestos).			
S14: Introduction to interpreting building and engineering plans (e.g. building permits, development approvals).			

Appendix 3: Example of ways in which an underpinning skill/knowledge may be demonstrate

Table 8: Example of ways in which an underpinning skill/knowledge may be demonstrated.

Underpinning skills and knowledge	Key Applied areas	Ways in which knowledge and skills are developed in the program
C1: Knowledge of written and verbal communication techniques and strategies suitable for diverse audiences, purposes and contexts.	• Safe and suitable food • Prevention and control of notifiable and communicable conditions • Water management • Environmental management • Land use management • Built environment • Indigenous environmental health • Sustainability and climate change • Emergency and incident management	• Using articulate, rational and appropriate expression • Listening effectively to others in an unbiased manner • Promoting the expression of diverse opinions and perspectives • Presenting accurate demographic, statistical, programmatic, and scientific information for professional and lay audiences • Communicating effectively both in writing and orally • Soliciting input from individuals and organizations • Advocating for environmental health programs and resources • Using the media, advanced technologies and/or community networks to communicate information • Negotiating common ground and areas of agreement • Articulating the goals, purposes, problems and needs of environmental health • Explaining the rationale for environmental health regulatory requirements and the value produced by a healthy environment • Interacting sensitively, effectively, and professionally with persons from diverse cultural, socio economic, educational, racial, ethnic and professional backgrounds, and persons of all ages and lifestyle preferences

Appendix 4: EHA Course Accreditation Process

- The University submits an application for accreditation to EHA. This application should include a detailed description of the course and how it aligns with the Course Accreditation Policy. This documentation should include:
    - University overview, history of environmental health education and future directions.
    - University educational approvals of the course and other relevant documentation from the university identifying its support for and establishment of the course.
    - Curriculum documents demonstrating how the course meets the EHA accreditation policy. In particular, all elements of the course should be mapped against the underpinning skills and knowledge.
    - Quality assurance and course evaluation documentation.
    - Subject/unit outlines including all week-by-week lectures, tutorials, labs, field visits.
    - Marketing brochures.
    - Websites.
    - Profiles of all academic staff involved in teaching the course.
    - Workplace integrated learning (WIL) activities, e.g. practicum requirements.
- The Accreditation Committee will then establish an accreditation panel to undertake the accreditation process and provide a report to the Board outlining the accreditation assessment process and recommending an outcome (e.g. accreditation be granted/declined).
- The Accreditation Panel will undertake a 'desktop' review the documentation submitted to assess the extent of alignment of the course with the Course Accreditation Policy. If this review indicates that the course content appears to align with the Course Accreditation Policy an on-site accreditation visit will then be scheduled.
- The on-site accreditation visit will generally consist of the following elements:
    - Welcome and initial comments by the Course Convenor.
    - Advice from the chair of the accreditation panel on the role of the panel and accreditation process.
    - Discussions with the Dean, Head of School, Course Convenor and other staff regarding the current program, program evaluation and quality assurance mechanisms.
    - Review of documentation and benchmarking to the EHUPAF.
    - Inspection of facilities, teaching and library resources.
    - A meeting with teaching staff, industry representatives, committee representatives and students.
    - Discussions with current environmental health students (or written feedback).
    - Discussions with Alumni or employer groups (or written feedback).
    - Comments from the Accreditation Panel.
- Based on the outcomes of the accreditation visit, the accreditation panel will report to the EHA Board of Directors via the chair of the Accreditation Committee and will make one of the following recommendations:

- That the course receives Full Accreditation for 5 years.
- That the course receives Provisional Accreditation for a period of time of no more than 3 years. This time period will be related to when the course has its first graduates and a follow-up review should be completed within 1 year of the first cohort of new graduates.
- That the course does not receive accreditation.

- If a "new course" incorporates the majority of units from a previously accredited course and meets all criteria as detailed in this policy, then full accreditation may be granted for the duration of the currently accredited course. The accreditation of "new courses" will be assessed on a case-by-case basis. The Board of EHA will resolve all decisions in relation to "new courses", in the first instance.[5]
- EHA will then provide written advice to the university regarding the outcomes of the course accreditation process. This advice will include both strengths and weaknesses of the course and opportunities/recommendations for improvement. In addition, a Certificate of Accreditation will be issued (if accreditation was granted). In the case of courses for which accreditation is not recommended, a detailed description of the areas for improvement/non-conformance with the Course Accreditation Policy will be provided with the intention of encouraging amendments that will enable the course to be accredited.
- If the structure or curriculum of an accredited course changes during their period of accreditation, the university is to immediately notify EHA of any changes so that the impact of these changes can be assessed to ensure that the course accreditation status can be maintained.
- If a university does not agree with the outcomes of the course accreditation process, they may lodge a written appeal to EHA outlining the nature of the issues to which they disagree in accordance with the procedures set out in section 8 of the policy.
- The administrative aspects of operating the Course Accreditation Process (e.g. organising travel arrangements for the on-site visit) may be supported by a nominated State Association and in this case an agreed reimbursement will be paid from EHA (national) to the State Association.

[5] The EHA National Board endorsed the inclusion of "new courses" in section 6.5 on 12 December 2014.

Appendix 5: EHA Course Accreditation Policy Process

The process leading to the development of the EHA Course Accreditation Policy commenced at the Educators Forum held as part of the 2003 National Conference in Hobart. The input from the Forum has subsequently been used to formulate a working draft of the undergraduate policy which was adopted by the Board of Directors in October 2005. Further development of the postgraduate policy was then undertaken and this was adopted by the Board of Directors in October 2006.

The Board has recognised the need for ongoing dialogue and input from education providers and other stakeholders throughout both this formulation process and the implementation of the policy.

Educators' Forum

The Educators' Forum is composed of representatives of education providers and government stakeholders who are interested in having their environmental health undergraduate and postgraduate courses accredited by EHA. The purpose of the Educators' Forum is to provide input and feedback on the EHA Accreditation Policy and to raise and consider issues pertaining to environmental health education and workforce development. The Educators' Forum meets annually in conjunction with the EHA National Conference.

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