Draft 3 and 5 Criteria Applied and Natural Science Accreditation Commission		
Current ASAC GENERAL CRITERION 3. STUDENT OUTCOMES	**Changes to current general criterion**	**Proposed ANSAC GENERAL CRITERION 3. STUDENT OUTCOMES**
The program must have documented student outcomes that prepare graduates to attain the program educational objectives. There must be a documented and effective process for the periodic review and revision of these student outcomes.	No edits or changes	The program must have documented student outcomes that prepare graduates to attain the program educational objectives. There must be a documented and effective process for the periodic review and revision of these student outcomes.
B. Associate degree programs must demonstrate that graduates have:	Reorganized to A. and edited	A. Associate degree program student outcomes must include, but are not limited to the following :
(a) an ability to apply knowledge of mathematics, sciences, and other related disciplines	Renumbered as Item 1, incorporated (e), edited per SASC	(1) An ability to identify, formulate, and solve broadly defined technical or scientific problems by applying knowledge of mathematics and science and/or technical topics to areas relevant to the discipline.
(b) an ability to conduct experiments, as well as to analyze and interpret data	Renumbered as Item 2 and edited per SASC	(2) An ability to conduct experiments or test theories, as well as to analyze and interpret data
(c) an ability to identify, formulate, and solve applied science problems	Combined with Item 1	See (1)
(d) an ability to function on teams	Renumbered as Item 3	(3) An ability to function on teams

(e) an understanding of professional and ethical responsibility	Renumbered as Item 4	(4) An understanding of professional and ethical responsibility
(f) an ability to communicate effectively	Renumbered as Item 5	(5) An ability to communicate effectively
(g) a recognition of the need for and an ability to engage in life-long learning	Moved to Curriculum	
(h) a knowledge of contemporary issues	Eliminated	
(i) an ability to use the techniques, skills, and modern applied science tools necessary for professional practice	Moved to curriculum	Now incorporated into Criterion 5, Paragraph 2, new item C
A. Baccalaureate degree programs must demonstrate that graduates have:	Reorganized and edited	B. Baccalaureate degree program student outcomes must include, but are not limited to the following:
(a) an ability to apply knowledge of mathematics, science, and applied sciences	Renumbered as Item 1 and incorporated (e) and SASC wording	(1) An ability to identify, formulate, and solve broadly defined technical or scientific problems by applying knowledge of mathematics and science and/or technical topics to areas relevant to the discipline.
(b) an ability to design and conduct experiments, as well as to analyze and interpret data	Renumbered as Item 3 and edited with SASC wording	(3) an ability to develop and conduct experiments or test hypotheses, analyze and interpret data and use scientific judgment to draw conclusions
(c) an ability to formulate or design a system, process, or program to meet desired needs	Renumbered as Item 2 and edited with SASC wording	(2) An ability to formulate or design a system, process, procedure or program to meet desired needs.

(d) an ability to function on multidisciplinary teams	Renumbered as Item 6 and edited per Task Group	(6) An ability to function effectively on teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.
(e) an ability to identify and solve applied science problems	Renumbered as Item 1,combined with (1), and edited	See (1) Above
(f) an understanding of professional and ethical responsibility	Renumbered as Item 5, combined with (h), and edited	(5) An ability to understand ethical and professional responsibilities and the impact of technical and/or scientific solutions in global, economic, environmental, and societal contexts.
(g) an ability to communicate effectively	Renumbered as Item 4 and edited per Task Group	(4) an ability to communicate effectively with a range of audiences
(h) the broad education necessary to understand the impact of solutions in a global and societal context	Combined with (f), and edited	(5) See Above
(i) a recognition of the need for and an ability to engage in life-long learning		Moved to curriculum 1st Paragraph
(j) a knowledge of contemporary issues		Eliminate
(k) an ability to use the techniques, skills, and modern scientific and technical tools necessary for professional practice.	Moved to curriculum	Now incorporated into Criterion 5, Paragraph 2, new item C

Current ASAC GENERAL CRITERION 5. CURRICULUM	Changes to current general criterion	Proposed ANSAC GENERAL CRITERION 5. CURRICULUM
The curriculum requirements specify subject areas appropriate to applied science programs but do not prescribe specific courses. The program's faculty must assure that the curriculum devotes adequate attention and time to each component, consistent with the objectives of the program and institution.	Edited	The curriculum requirements specify subject areas appropriate to applied or natural sciences programs but do not prescribe specific courses. For the purposes of accreditation, mathematics and statistics programs may be reviewed under the definition of applied and natural sciences. The program's faculty must assure that the curriculum devotes adequate attention and time to each component, consistent with the objectives of the program and institution.
	New (NOTE – EAC has defined college level math differently. Definition of Natural Science is pulled in part from EAC and SASC document Definition of Applied Science is pulled from SASC document.	College level Mathematics consists of mathematics that requires a degree of mathematical sophistication at least equivalent to that of college algebra. For illustrative purposes, some examples of college-level mathematics include college algebra, precalculus, calculus, differential equations, probability, statistics, linear algebra and discrete mathematics. Natural Science increases the knowledge base of a field of

		research and science collectively that are involved in the study of the physical world and its phenomena. Natural science consists of but is not limited to biology, physics, chemistry, geology and other natural sciences including life, earth and space sciences. Applied Science uses the knowledge base in natural science to solve specific problems.
The curriculum must include: a. a combination of college-level mathematics and basic sciences (some with experimental experience) appropriate to the discipline b. applied science topics appropriate to the program c. a general education component that complements the technical content of the curriculum and is consistent with the program and institution objectives.	Items a and b are edited per SASC. Item c is edited	The curriculum must include: a. combination of college-level mathematics and sciences (some with laboratory and/or experimental experience) appropriate to the discipline b. advanced technical and/or science topics appropriate to the program c. a general education component that complements the technical and scientific content of the curriculum and is consistent with the program and institution objectives.
Students in baccalaureate degree programs must also be prepared for applied science practice through a	Edited per SASC and Task Group	Students in baccalaureate degree programs must also be prepared for practice in a field

curriculum culminating in comprehensive projects or experiences based on the cumulative knowledge and skills acquired in earlier course work.		of applied or natural sciences through a curriculum culminating in comprehensive projects or experiences based on the cumulative knowledge and skills acquired in earlier course work.