

Senate Reference No. 11-30


TO: Fort Wayne Senate  
FROM: Educational Policy Committee  
DATE: April 23, 2012  
SUBJECT: General Education Learning Objectives and the Baccalaureate Framework

The Fort Wayne Senate approved the attached report (Senate Reference No. 11-30) to be included “for information only” in the April 9, 2012 agenda.



DEPARTMENT OF POLITICAL SCIENCE

TO: Executive Committee

FROM: Educational Policy Committee  
James Toole, Chair 

DATE: April 12, 2012

SUBJ: Executive Committee Charge to EPC Concerning General Education

On November 21, 2011, the Executive Committee sent a memo to EPC. The memo instructed EPC to perform a review of General Education at IPFW, highlighting the immediate need to clearly articulate the link between the Baccalaureate Framework and General Education.

Acting on this memo, EPC directed the General Education Subcommittee (GES) to (1) decide upon specific General Education learning objectives for each of the six General Education areas and (2) connect each specific learning objective to one or more specific foundations contained in the Baccalaureate Framework. At the end of March, GES reported back to EPC.


EPC is satisfied with the report, which completes the specific tasks assigned to GES by the committee. EPC regards the production of this report as a good first step in any future efforts to review and further improve General Education.

EPC hereby reports back to the Executive Committee. Attached are the February 13, 2012 memo from EPC to GES, the March 26, 2012 memo from GES to EPC, and the GES report itself. The report comes in three attachments. Please let us know if you have any questions.



DEPARTMENT OF POLITICAL SCIENCE

To: General Education Subcommittee, Linda Wright-Bower, Chair  
Duston Moore, Director of General Studies

From: Educational Policy Committee, James Toole, Chair 

Subject: General Education Learning Objectives and the Baccalaureate Framework

Date: February 13, 2012

On November 21, 2011, the Executive Committee sent a memo to EPC. The memo highlights the need to clearly articulate the link between the Baccalaureate Framework and General Education, and it instructs EPC to perform a review of General Education at IPFW.

After discussing the matter at several recent meetings, EPC charges the General Education Subcommittee with two immediate tasks. The first is to decide upon specific learning objectives for each of the six General Education areas. If it chooses, the subcommittee may simply approve the list contained in the August 2002 Draft Learning Objectives. The second task is to connect each specific learning objective explicitly to one or more specific foundations contained in the Baccalaureate Framework.

The list of learning objectives and their connections to the Baccalaureate Framework are to be delivered to the chair of EPC by March 30, 2012. EPC asks that this work be made a priority, second only to the approval of Gen Ed course proposals.

EPC regards the completion of these tasks as a first step in any future efforts to further improve General Education Program policymaking. For example, EPC recognizes that it might be useful to revise SD 99-25. In our view, reaching formal agreement on learning objectives should make it easier in the future to revise relevant sections of SD 99-25.



OFFICE OF GENERAL EDUCATION

TO: Educational Policy Committee (EPC)  
James Toole, Chair

FROM: General Education Subcommittee  
Linda Wright-Bower, Chair

DATE: March 26, 2012

SUBJECT: EPC Charge to the GES concerning the link between the Baccalaureate Framework and the learning outcomes of the General Education program

DISPOSITION: To EPC for review; upon approval to the presiding officer for implementation

WHEREAS, the EPC has directed the GES to decide upon specific learning objectives for each of the six General Education areas; and,

WHEREAS, the EPC has directed GES to connect each specific learning objective explicitly to one or more specific foundations contained in the Baccalaureate Framework; and,

WHEREAS, the EPC has identified completion of these tasks as a first step in any future efforts to further improve General Education Program policymaking; and,

WHEREAS, reaching formal agreement on learning objectives should make it easier in the future to revise relevant sections of SD 99-25; and,

WHEREAS, an updating of current departmental definitions for foundation skills adds to the clarity of the learning outcomes document for future work and debate by the GES subcommittee; and,

BE IT RESOLVED, that the EPC review the GES revised general education learning objectives, based upon the 2005 draft document of learning objectives, and the two tables listing learning outcomes associated with each foundation and another assigning foundations to each specific learning outcome.

Attachment #1 Revised List of General Education Learning Outcomes, revised 3-26-12

Attachment #2 Listing of General Education Learning Outcomes by Foundation Areas

Attachment #3 Listing of Baccalaureate Framework Areas Associated with Learning Outcomes

---

**IPFW General Education Area Outcomes**

---

1

**Foundation Skills (outcomes 1 through 14) are reinforced in areas 2-6.**

**Area 1 Outcomes**

**Reading and Writing includes the following 3 student capabilities:<sup>i</sup>**

1. Demonstrate critical thinking through the interrelated activities of reading and writing. For example, students might annotate, respond to, and formally evaluate texts and analyze, synthesize, and interpret their writings and those of peers and professionals.
2. Read and write clearly and persuasively in various rhetorical contexts. For example, students might read and write expressive, persuasive, and informative papers for personal, public, and academic audiences using the processes, formats, and styles appropriate for these audiences.
3. Apply methods of inquiry appropriate to various rhetorical contexts so that students move beyond mere reporting of information to make an original contribution to knowledge. For example, students might do primary and secondary research ranging from introspection to the use of public sources.

**Quantitative reasoning includes the following 5 student capabilities:<sup>ii</sup>**

4. Reading and understanding information given in various formats, such as in graphs, tables, geometric figures, mathematical formulas or in text (e.g., in real-life problems).
5. Interpreting quantitative information and drawing appropriate inferences from it.
6. Solving problems, using algebra (study of abstract structure), analysis (study of process and the infinite), geometry (study of form), combinatorics (study of finite structure), or combinations these core mathematical approaches (e.g., algebra/analysis as functional analysis and set theory, algebra/geometry as traditionally found in secondary mathematical education, algebra/combinatorics as formal logic, analysis/combinatorics as probability theory and statistics, analysis/geometry as topology and the calculus of variations, combinatorics/geography as graph theory and combinatorial design).
7. Estimating answers and checking answers for reasonableness; communicating quantitative information verbally, numerically, algebraically, or graphically.
8. Recognizing the limitations of mathematical or statistical methods.

**Communication includes the following 6 student capabilities<sup>iii</sup>**

9. Speak precisely, clearly, and persuasively.
10. Listen actively and with comprehension.
11. Formulate and assess their own arguments as well as the arguments of others.
12. Understand and apply basic principles of small group communication, interpersonal communication and public speaking.
13. Work in an increasingly diverse society.
14. Demonstrate computer literacy.

**Information Literacy includes the following 6 student capabilities<sup>iv</sup>**

15. Determine the extent of information needed.

16. Access the needed information effectively and efficiently.
17. Evaluate information and its sources critically.
18. Incorporate selected information into one's knowledge base.
19. Use information effectively to accomplish a specific purpose.
20. Understand the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally.

### **Area II Outcomes**

#### **Natural and Physical Sciences include the following 5 student capabilities**

21. Describe bases of living and non-living systems.
22. Explain the development of scientific knowledge.
23. Understand data collection, analysis, and quantitative problem solving.
24. Demonstrate familiarity with scientific literature.
25. Written and/or oral communication.

### **Area III Outcomes**

#### **Individual, Culture, and Society include the following 4 student capabilities**

26. Understand the nature and diversity of individuals, organizations, cultures and societies.
27. Explain how knowledge of social and behavioral processes is developed, how information is gathered, hypothesis formulated and analyzed, and theories developed.
28. Apply their knowledge in written and/or oral communication.
29. Understand data collection, analysis, and quantitative problem solving.

### **Area IV Outcomes**

#### **Humanistic Thought include the following 6 student capabilities**

30. Demonstrate understanding of scholarly approaches to such abiding issues as the meaning of life, the role of the arts in understanding what being human means, and the limits of knowledge.
31. Evaluate traditions that have shaped the learners' values, beliefs, and aesthetic preferences.
32. Compare traditions that have shaped the learner to different traditions.
33. Interpret written work or creative work e.g., essays, works of art and music.
34. Apply their knowledge in written and /or oral communication.
35. Understand data collection, analysis, and quantitative problem solving.

### **Area V Outcomes**

#### **Creative Expression include the following 3 student capabilities**

36. Demonstrate understanding of the creative process using the vocabulary of the appropriate discipline.
37. Perform or create a work of personal expression and bring the work to fruition using applicable skills.
38. Articulate a reflection and critical evaluation of their own and others creative efforts using written and/or oral communication.

### Area VI Outcomes

#### **Inquiry and Analysis includes the following 4 student capabilities**

39. Gather, evaluate, select, organize and synthesize material in order to complete a research or creative project.
40. Present the project in an appropriate medium.
41. Think critically and solve problems by applying knowledge and skills gained in earlier courses.
42. Apply the knowledge gain across disciplinary boundaries.

---

<sup>i</sup> Taken from the IPFW Department of English and Linguistics Writing Program Goals.

<sup>ii</sup> Modified from 'What is Quantitative Reasoning? Defining the Construct for Assessment Purposes', Carol Anne Dwyer, Ann Gallagher, Jutta Levin, and Mary E. Morley, Educational Testing Service, Princeton, NJ. 2003. The authors write: "These capabilities are included as competencies that all college graduates should have and are included in the report 'Quantitative Reasoning for College Graduates: A Complement to the Standards of the Subcommittee on Quantitative Literacy Requirements of the MAA' (Sons, 1996)." p. 12. Further, "The NCTM (2000); the Mathematical Association of America (MAA) (Mathematical Association of America [MAA], 2003; Sons, 1996); the American Mathematical Society (AMS) (Howe, 1998); and the American Mathematical Association of Two-Year Colleges (AMATYC) (American Mathematical Association of Two-Year Colleges [AMATYC], 1995), in their statements about the goals of mathematical education, all discuss quantitative reasoning as an ability that all high school and college students can and should develop. These documents also discuss a great deal of curricular material in addition to quantitative reasoning. They have certain differences in scope as well, but there is substantial agreement among them as to what constitutes quantitative reasoning and what constitutes the mathematics content on which the reasoning is based. The following material reflects that broad and strong consensus in the world of mathematics." p. 11-12.

<sup>iii</sup> Taken from the IPFW Department of Communication.

<sup>iv</sup> Taken from Information Literacy Competency Standards for Higher Education of The Association of College and Research Libraries (ACRL) a division of the American Library Association.

**General Education Outcome Alignment with Baccalaureate Framework - 3/26/12**

1

Area	General Education Outcomes/ Baccalaureate Framework	I. Know	II. Apply	III. Value	IV. Lead	V. Think	VI. Communicate
1	1. Demonstrate critical thinking through the interrelated activities of reading and writing. For example, students might annotate, respond to, and formally evaluate texts and analyze, synthesize, and interpret their writings and those of peers and professionals.					X	X
1	2. Read and write clearly and persuasively in various rhetorical contexts. For example, students might read and write expressive, persuasive, and informative papers for personal, public, and academic audiences using the processes, formats, and styles appropriate for these audiences.						X
1	3. Apply methods of inquiry appropriate to various rhetorical contexts so that students move beyond mere reporting of information to make an original contribution to knowledge. For example, students might do primary and secondary research ranging from introspection to the use of public sources.	X	X				
1	4. Reading and understanding information given in various formats, such as in graphs, tables, geometric figures, mathematical formulas or in text (e.g., in real-life problems).	X					
1	5. Interpreting quantitative information and drawing appropriate inferences from it.		X				
1	6. Solving problems, using algebra (study of abstract structure), analysis (study of process and the infinite), geometry (study of form), combinatorics (study of finite structure), or combinations these core mathematical approaches (e.g., algebra/analysis as functional analysis and set theory, algebra/geometry as traditionally found in secondary mathematical education, algebra/combinatorics as formal logic, analysis/combinatorics as probability theory and statistics, analysis/geometry as topology and the calculus of variations, combinatorics/geography as graph theory and combinatorial design.		X				
1	7. Estimating answers and checking answers for reasonableness; communicating quantitative information verbally, numerically, algebraically, or graphically.		X			X	X
1	8. Recognizing the limitations of mathematical or statistical methods.					X	
1	9. Speak precisely, clearly, and persuasively.						X
1	10. Listen actively and with comprehension.						X
1	11. Formulate and assess their own arguments as well as the arguments of others.					X	



Area	General Education Outcomes/ Baccalaureate Framework	I. Know	II. Apply	III. Value	IV. Lead	V. Think	VI. Communicate
1	12. Understand and apply basic principles of small group communication, interpersonal communication and public speaking.		x				x
1	13. Work in an increasingly diverse society.				x		
1	14. Demonstrate computer literacy.	x					
1	15. Determine the extent of information needed.	x	x			x	
1	16. Access the needed information effectively and efficiently.	x	x			x	
1	17. Evaluate information and its sources critically.		x			x	
1	18. Incorporate selected information into one's knowledge base.	x	x				
1	19. Use information effectively to accomplish a specific purpose.		x			x	
1	20. Understand the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally.		x	x	x		
2	21. Describe bases of living and non-living systems.	x					
2	22. Explain the development of scientific knowledge.	x					
2	23. Understand data collection, analysis, and quantitative problem solving.		x			x	
2	24. Demonstrate familiarity with scientific literature.		x			x	
2	25. Written and/or oral communication.						x
3	26. Understand the nature and diversity of individuals, organizations, cultures and societies.	x			x		
3	27. Explain how knowledge of social and behavioral processes is develop, how information is gathered, hypothesis formulated and analyzed, and theories developed.		x		x		x
3	28. Apply their knowledge in written and/oral communication.		x				x
3	29. Understand data collection, analysis, and quantitative problem solving.		x			x	
4	30. Demonstrate understanding of scholarly approaches to such abiding issues as the meaning of life, the role of the arts in understanding what being human means, and the limits of	x					

Area	General Education Outcomes/ Baccalaureate Framework	I. Know	II. Apply	III. Value	IV. Lead	V. Think	VI. Communicate
	knowledge.						
4	<b>31.</b> Evaluate traditions that have shaped the learners' values, beliefs, and aesthetic preferences.		x	x		x	
4	<b>32.</b> Compare traditions that have shaped the learner to different traditions.		x		x		
4	<b>33.</b> Interpret written work or creative work e.g., essays, works of art and music.		x			x	
4	<b>34.</b> Apply their knowledge in written and /or oral communication.		x				x
4	<b>35.</b> Understand data collection, analysis, and quantitative problem solving.		x			x	
5	<b>36.</b> Demonstrate understanding of the creative process using the vocabulary of the appropriate discipline.	x					x
5	<b>37.</b> Perform or create a work of personal expression and bring the work to fruition using applicable skills.		x			x	
5	<b>38.</b> Articulate a reflection and critical evaluation of their own and others creative efforts using written and/or oral communication.					x	x
6	<b>39.</b> Gather, evaluate, select, organize and synthesize material in order to complete a research or creative project.		x			x	
6	<b>40.</b> Present the project in an appropriate medium.		x			x	x
6	<b>41.</b> Think critically and solve problems by applying knowledge and skills gained in earlier courses.		x			x	
6	<b>42.</b> Apply the knowledge gain across disciplinary boundaries.		x			x	

## Baccalaureate Framework Alignment with General Education Outcomes- 3/26/12

Baccalaureate Framework / Outcomes	General Education Outcomes
<b>I. Acquisition of Knowledge</b>	
Students will demonstrate breadth of knowledge across disciplines and depth of knowledge in their chosen discipline. In order to do so, students must demonstrate the requisite information- seeking skills and technological competencies.	3,4,14,15,16,18,21,22,26,30,36
<b>II. Application of Knowledge</b>	
Students will demonstrate the ability to integrate and apply that knowledge, and, in so doing, demonstrate the skills necessary for life-long learning.	3,5,6,7,12,15,16,17,18,19,20,23,24,27,28,29,31,32,33,34,35,37,39,40,41,42
<b>III. Personal and Professional Values</b>	
Students will demonstrate the highest levels of personal integrity and professional ethics.	20,31
<b>IV. A Sense of Community</b>	
Students will demonstrate the knowledge and skills necessary to be productive and responsible citizens and leaders in local, regional, national, and international communities. In so doing, students will demonstrate a commitment to free and open inquiry and mutual respect across multiple cultures and perspectives.	13,20,26,27,32
<b>V. Critical Thinking and Problem Solving</b>	
Students will demonstrate facility and adaptability in their approach to problem solving. In so doing, students will demonstrate critical-thinking abilities and familiarity with quantitative and qualitative reasoning.	1,7,8,11,15,16,17,19,23,24,29,31,33,35,37,38,39,40,41,42
<b>VI. Communication</b>	
Students will demonstrate the written, oral, and multimedia skills necessary to communicate effectively in diverse settings.	1,2,7,9,10,12,25,27,28,34,36,38,40