

## 2020 AOL Report

## Green Business and Policy program

Green Business and Policy Program (GBP) is designed to provide students with distinctive capabilities and leadership skills to be competitive professionals in the global environment, sustainable energy, and green related fields. Students undergo a carefully structured program to improve their knowledge on organizations, management, strategic thinking, green business ethics and marketing skills. The program is ideal for students who intend to pursue a career as a global green policy maker and green business leader.

### Overall Review

Our program targets five learning goals to cultivate global green policy makers and green business leaders. We assess understanding new environmental challenges and balance between social demand and firm's performance for consciousness on energy usage and environmental issues, analysis of business cases and synthesis for different discipline areas for multi-disciplinary competence, microeconomics tools and ideas to solve multidisciplinary problems for problem solving, understanding global issues and command of business English for global communication, and high-performance leadership skill and successful team building to access leadership and teamwork.

In general, all average scores related to each learning goal except Leadership and Teamwork (L5) exceed 2.3, which implies our graduates successfully meet expectations for each learning goal. Their consciousness on energy usage and environmental issues are outstanding. However, our graduates have the most difficulty in academic teamwork. Especially, they need to be improved for leadership and teamwork. So, our college will intensify lectures related to leadership and teamwork. In particular, college needs to put more emphasis on how to have high-performance leadership skills, and build a team successfully in competitive environment.

- Total number of courses: 22 (Spring: 8, Summer: 1, Fall: 12)
- Total number of graduates: 12
- Total number of enrollment: 40 (1<sup>st</sup>: 26, 2<sup>nd</sup>: 14)
- Sample: more than 3 (Necessary sample: 25% of graduates = 3)
- Assessment courses

Learning Goal 1	L11	GG501 Green Business Theory and Practice
	L12	GG501 Green Business Theory and Practice
Learning Goal 2	L21	GG531 Green Accounting
	L22	GG531 Green Accounting
Learning Goal 3	L31	GG572 Energy and Environment Economics
	L32	GG572 Energy and Environment Economics
Learning Goal 4	L41	GG576 Climate Change and International Collaboration
	L42	GG576 Climate Change and International Collaboration
Learning Goal 5	L51	GG589 Introduction to Green Transportation Systems

	L52	GG589 Introduction to Green Transportation Systems
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### Overview of Assessment

<b>Green Business and Policy program(GBP): Assessment Learning Goal 1</b>		
<b>Learning Goal 1 Consciousness on Energy Usage &amp; Environmental Issues</b> <b>: Our graduates will improve their ability to identify opportunities to create business value from environment and sustainability issues in green growth.</b>		
<b>Learning Objective</b>	<b>Sample</b>	<b>Methods</b>
L11) Our students will understand new environmental challenges that are most likely to pose both growth opportunities and threats to green business.	Students enrolled in GG501 (N=27)	Course-embedded Survey
L12) Our students will identify conditions under which companies can maintain an appropriate balance between accommodating social and institutional demands for environmental issues and achieving superior performance.	Students enrolled in GG501 (N=27)	Course-embedded Survey
<b>Findings</b>		
<ul style="list-style-type: none"> <li>- The average scores for L11 and L12 are 3.000 and 3.000.</li> <li>- The average score exceeded level 2 performance (Meet Expectations) for L11 and L12, using course-embedded survey in the GG501 course.</li> <li>- The ratio of students exceeds expectations (scored over 3) for both L11 and L12 is 100.0%.</li> </ul> <p>* Criteria: 1 (Fails to Meet Expectations), 2 (Meet Expectations), 3 (Exceeds Expectations)</p>		

<b>Green Business and Policy program(GBP): Assessment Learning Goal 2</b>		
<b>Learning Goal 2 Multi-disciplinary competence : Our graduates will synergistically understand green policy, green technology, and green business.</b>		
<b>Learning Objective</b>	<b>Sample</b>	<b>Methods</b>
L21) Our students will be able to strategically analyze business cases and will demonstrate the ability of sound business judgement.	Students enrolled in GG531 (N=15)	Course-embedded Survey
L22) Our students will synthesize different discipline areas.	Students enrolled in GG531 (N=15)	Course-embedded Survey
<b>Findings</b>		
<ul style="list-style-type: none"> <li>- The average scores for L21 and L22 are 2.817 and 2.250.</li> <li>- The average score exceeded level 2 performance (Meet Expectations) for L21 and L22, using course-embedded survey in the GG531 course.</li> <li>- 73.3% (11/15) students exceed expectations in factual knowledge (Trait 1 for L21).</li> <li>- 100.0% (15/15) students exceed expectations in management principle (Trait 2 for L22).</li> </ul> <p>* Criteria: 1 (Fails to Meet Expectations), 2 (Meet Expectations), 3 (Exceeds Expectations)</p>		

<b>Green Business and Policy program(GBP): Assessment Learning Goal 3</b>		
<b>Learning Goal 3 Problem Solving</b> <b>: Our graduates will be able to deal with multidisciplinary problems, using diverse tools and techniques.</b>		
<b>Learning Objective</b>	<b>Sample</b>	<b>Methods</b>
L31) Our students will understand necessary microeconomic tools to analyze environmental problems.	Students enrolled in GG572 (N=20)	Course-embedded Survey
L32) Our students will develop contemporary ideas to solve multidisciplinary problems.	Students enrolled in GG572 (N=20)	Course-embedded Survey
<b>Findings</b>		
<ul style="list-style-type: none"> <li>- The average scores for L31 and L32 are 2.300 and 2.325.</li> <li>- The average score exceeded level 2 performance (Meet Expectations) for L31 and L32, using the course-embedded survey in the GG572 course.</li> <li>- All students in GG572 course meet expectation for understanding necessary microeconomic tools and develop contemporary ideas to solve multidisciplinary problems.</li> <li>- The achievement in understanding microeconomic tools (L31) is lower than that in developing ideas to solve multidisciplinary problems (L32).</li> <li>- The ratio of students exceeds expectations (scored over 3) for L31 and L32 is 25.0% and 20.0% respectively.</li> </ul> <p>* Criteria: 1 (Fails to Meet Expectations), 2 (Meet Expectations), 3 (Exceeds Expectations)</p>		

<b>Green Business and Policy program(GBP): Assessment Learning Goal 4</b>		
<b>Learning Goal 4 Global Communication</b> <b>: Our graduates will be able to effectively communicate in English for international projects.</b>		
<b>Learning Objective</b>	<b>Sample</b>	<b>Methods</b>
L41) Our students will understand global business issues and relate current issues to emerging business opportunities.	Students enrolled in GG576 (N=16)	Course-embedded Survey
L42) Our students will have command of business English or other language of major global market.	Students enrolled in GG576 (N=16)	Course-embedded Survey
<b>Findings</b>		
<ul style="list-style-type: none"> <li>- The average scores for L41 and L42 are 2.313 and 2.458.</li> <li>- The average score exceeded level 2 performance (Meet Expectations) for L41 and L42, using the course embedded survey in the GG604 course.</li> <li>- The achievement in command of business English (L42) is higher than that in understanding global business issues (L41).</li> <li>- 50.0% (8/16) students exceed expectations in identification of global issues (Trait 1 for L41).</li> <li>- The ratio of students exceeds expectations (scored over 3) for L41 and L42 is 12.5% and 43.8% respectively.</li> </ul> <p>* Criteria: 1 (Fails to Meet Expectations), 2 (Meet Expectations), 3 (Exceeds Expectations)</p>		

<b>Green Business and Policy program(GBP): Assessment Learning Goal 5</b>		
<b>Learning Goal 5 Leadership and Teamwork</b> <b>: Our graduates will have the capability and attitude of team building and lead a team task successfully.</b>		
<b>Learning Objective</b>	<b>Sample</b>	<b>Methods</b>
L51) Our students will have high-performance leadership skill.	Students enrolled in GG589 (N=15)	Course-embedded Survey
L52) Our students will know how to build a team successfully in competitive environment.	Students enrolled in GG589 (N=15)	Course-embedded Survey
<b>Findings</b>		
<ul style="list-style-type: none"> <li>- The average scores for L51 and L52 are 1.967 and 1.983.</li> <li>- The average score could not exceed level 2 performance (Meet Expectations) for L51 and L52, using the course embedded survey in the GG589 course.</li> <li>- The achievement in high performance leadership skill (L51) is lower than that in successful team building in competitive environment (L52).</li> <li>- No student exceeded expectations in each learning objective.</li> <li>- 13.3% (2/15) students exceed expectations in balance between task and interpersonal relations for leadership skill (Trait 2 for L51).</li> </ul> <p>* Criteria: 1 (Fails to Meet Expectations), 2 (Meet Expectations), 3 (Exceeds Expectations)</p>		

**Data Analysis and Results**

Assessment Learning Goal 1(L1): GG501 Green Business: Theory and Practice							
L1: Consciousness on Energy Usage & Environmental Issues							
Student No.	L11: Our students will understand new environmental challenges that are most likely to pose both growth opportunities and threats to green business.			L12: Our students will identify conditions under which companies can maintain an appropriate balance between accommodating social and institutional demands for environmental issues and achieving superior performance.			
	Trait 1. Identifies Challenges	Trait 2. Importance	Trait 3. Understanding	Trait 1. Stakeholders Consideration	Trait 2. Options Development	Trait 3. Options Evaluation	Trait 4. Decision and Action
1	3	3	3	3	3	3	3
2	3	3	3	3	3	3	3
3	3	3	3	3	3	3	3
4	3	3	3	3	3	3	3
5	3	3	3	3	3	3	3
6	3	3	3	3	3	3	3
7	3	3	3	3	3	3	3
8	3	3	3	3	3	3	3
9	3	3	3	3	3	3	3
10	3	3	3	3	3	3	3
11	3	3	3	3	3	3	3
12	3	3	3	3	3	3	3
13	3	3	3	3	3	3	3
14	3	3	3	3	3	3	3
15	3	3	3	3	3	3	3

16	3	3	3	3	3	3	3
17	3	3	3	3	3	3	3
18	3	3	3	3	3	3	3
19	3	3	3	3	3	3	3
20	3	3	3	3	3	3	3
21	3	3	3	3	3	3	3
22	3	3	3	3	3	3	3
23	3	3	3	3	3	3	3
24	3	3	3	3	3	3	3
25	3	3	3	3	3	3	3
26	3	3	3	3	3	3	3
27	3	3	3	3	3	3	3
<b># of 3 point</b>	<b>27</b>	<b>27</b>	<b>27</b>	<b>27</b>	<b>27</b>	<b>27</b>	<b>27</b>
<b># of 2 point</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b># of 1 point</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Score</b>	<b>81</b>	<b>81</b>	<b>81</b>	<b>81</b>	<b>81</b>	<b>81</b>	<b>81</b>
<b>Average</b>	<b>3.000</b>	<b>3.000</b>	<b>3.000</b>	<b>3.000</b>	<b>3.000</b>	<b>3.000</b>	<b>3.000</b>
<b>Total Average</b>	<b>3.000</b>			<b>3.000</b>			

Criteria: 1 (Fails to Meet Expectations), 2 (Meet Expectations), 3 (Exceeds Expectations)



Assessment Learning Goal 2(L2): GG531 Green Accounting										
L2: Multi-disciplinary Competence										
Student No.	L21: Our students will be able to strategically analyze business cases and will demonstrate the ability of sound business judgment.				L22: Our students will synthesize different discipline areas.					
	Trait 1. Factual knowledge	Trait 2. Identification of case problems/issues	Trait 3. Recommendations	Trait 4. Business judgment	Trait 1. Consideration	Trait 2. Management principle	Trait 3. Discipline knowledge	Trait 4. Intellectual sensitivity	Trait 5. Horizontal synthesis	Trait 6. Vertical synthesis
1	3	3	3	3	3	3	3	3	3	3
2	3	3	3	3	3	3	3	3	3	3
3	3	3	3	3	3	3	3	3	3	3
4	3	3	3	3	3	3	3	3	3	3
5	3	3	3	3	3	3	3	3	3	3
6	3	3	3	3	3	3	3	3	3	3
7	3	3	3	2	3	3	2	2	2	3
8	3	3	3	2	3	3	2	2	3	3
9	2	3	3	3	3	3	3	3	3	3
10	2	3	3	2	3	3	2	2	2	3
11	3	3	3	3	3	3	3	3	3	3
12	3	3	3	2	3	3	2	3	3	3
13	2	3	3	2	3	3	2	2	2	3
14	3	3	3	2	3	3	2	2	2	3

15	2	3	3	2	3	3	2	2	2	3
<b># of 3 point</b>	<b>11</b>	<b>15</b>	<b>15</b>	<b>8</b>	<b>15</b>	<b>15</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>15</b>
<b># of 2 point</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>6</b>	<b>5</b>	<b>0</b>
<b># of 1 point</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Score</b>	<b>41</b>	<b>45</b>	<b>45</b>	<b>38</b>	<b>45</b>	<b>45</b>	<b>38</b>	<b>39</b>	<b>40</b>	<b>45</b>
<b>Average</b>	<b>2.733</b>	<b>3.000</b>	<b>3.000</b>	<b>2.533</b>	<b>3.000</b>	<b>3.000</b>	<b>2.533</b>	<b>2.600</b>	<b>2.667</b>	<b>3.000</b>
<b>Total Average</b>	<b>2.817</b>				<b>2.800</b>					

Criteria: 1 (Fails to Meet Expectations), 2 (Meet Expectations), 3 (Exceeds Expectations)

<b>Assessment Learning Goal 3(L3): GG572E Energy and Environmental Economics</b>				
<b>L3: Problem Solving</b>				
Student No.	L31: Our students will understand necessary microeconomic tools to analyze environmental problems.		L32: Our students will develop contemporary ideas to solve multidisciplinary problems.	
	Trait 1. Application of strategic analytical Tools	Trait 2. Application of financial analysis	Trait 1. Discipline-related concepts and issues	Trait 2. Generation of alternatives
1	2	2	2	2
2	2	2	2	2
3	2	2	2	3
4	2	3	3	2
5	2	2	2	2
6	2	2	3	2
7	2	2	2	2
8	2	2	2	3
9	2	2	2	2
10	2	2	2	2
11	3	3	2	3
12	2	2	2	2
13	3	3	3	3
14	2	2	2	2
15	2	2	2	2
16	3	2	3	3
17	3	3	2	2
18	2	2	2	2
19	3	3	3	3

20	3	3	3	3
<b># of 3 point</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>7</b>
<b># of 2 point</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>13</b>
<b># of 1 point</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Score</b>	<b>46</b>	<b>46</b>	<b>46</b>	<b>47</b>
<b>Average</b>	<b>2.300</b>	<b>2.300</b>	<b>2.300</b>	<b>2.350</b>
<b>Total Average</b>	<b>2.300</b>		<b>2.325</b>	

Criteria: 1 (Fails to Meet Expectations), 2 (Meet Expectations), 3 (Exceeds Expectations)

Assessment Learning Goal 4(L4): GG576E Climate Change and International Collaboration							
L4: Global Communication							
Student No.	L41: Our students will understand global business issues and relate current issues to emerging green business opportunities.				L42: Our students will have command of business English or other language of major global market.		
	Trait 1. Identification of global issues	Trait 2. Analysis of global issues	Trait 3. Application of analysis to global business situation	Trait 4. Cultural differences	Trait 1. Knowledge	Trait 2. Comprehension	Trait 3. Communication
1	2	2	2	2	2	2	2
2	2	3	2	2	3	3	3
3	2	2	2	2	2	2	2
4	2	2	2	2	2	2	2
5	2	2	1	2	2	2	2
6	3	3	2	3	3	3	3
7	2	2	1	2	3	3	3
8	2	2	2	2	2	2	2
9	3	3	3	3	3	3	3
10	3	3	3	3	3	3	3
11	3	3	3	2	3	3	3
12	3	3	2	2	3	2	2
13	3	3	3	2	3	3	3
14	2	2	2	2	2	2	2
15	3	2	2	2	2	2	2
16	3	2	2	2	2	2	2
<b># of 3 point</b>	<b>8</b>	<b>7</b>	<b>4</b>	<b>3</b>	<b>8</b>	<b>7</b>	<b>7</b>

<b># of 2 point</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>13</b>	<b>8</b>	<b>9</b>	<b>9</b>
<b># of 1 point</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Score</b>	<b>40</b>	<b>39</b>	<b>34</b>	<b>35</b>	<b>40</b>	<b>39</b>	<b>39</b>
<b>Average</b>	<b>2.500</b>	<b>2.438</b>	<b>2.125</b>	<b>2.188</b>	<b>2.500</b>	<b>2.438</b>	<b>2.438</b>
<b>Total Average</b>	<b>2.313</b>				<b>2.458</b>		

Criteria: 1 (Fails to Meet Expectations), 2 (Meet Expectations), 3 (Exceeds Expectations)

Assessment Learning Goal 5(L5): GG589 Introduction to Green Transportation Systems								
L5: Leadership and Teamwork								
Student No.	L51: Our students will have high-performance leadership skill.				L52: Our students will know how to build a team successfully in competitive environment.			
	Trait 1. Confidence	Trait 2. Balance between task and interpersonal relations	Trait 3. Ability to listen	Trait 4. Agenda	Trait 1. Commitment	Trait 2. Balance between task and interpersonal relations	Trait 3. Contributions	Trait 4. Stays on track
1	2	2	3	3	3	2	3	2
2	2	2	3	2	3	2	3	2
3	2	2	2	2	3	2	2	2
4	3	3	2	2	3	2	2	2
5	2	2	2	2	2	2	2	2
6	2	2	2	2	2	2	2	2
7	2	1	1	1	1	2	1	2
8	2	2	1	1	2	2	1	2
9	2	2	2	1	1	2	2	2
10	2	2	2	2	2	1	2	2
11	1	2	2	2	2	1	2	2
12	2	2	2	2	2	2	1	2
13	2	2	2	2	2	2	2	2
14	2	2	2	2	2	2	2	2
15	2	2	2	2	2	2	2	2
<b># of 3 point</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>0</b>

<b># of 2 point</b>	<b>13</b>	<b>13</b>	<b>11</b>	<b>11</b>	<b>9</b>	<b>13</b>	<b>10</b>	<b>15</b>
<b># of 1 point</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>0</b>
<b>Total Score</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>28</b>	<b>32</b>	<b>28</b>	<b>29</b>	<b>30</b>
<b>Average</b>	<b>2.000</b>	<b>2.000</b>	<b>2.000</b>	<b>1.867</b>	<b>2.133</b>	<b>1.867</b>	<b>1.933</b>	<b>2.000</b>
<b>Total Average</b>	<b>1.967</b>				<b>1.983</b>			

Criteria: 1 (Fails to Meet Expectations), 2 (Meet Expectations), 3 (Exceeds Expectations)