

IMPERIAL VALLEY COLLEGE
PROGRAM REVIEW COMPLIANCE FORM AND REQUEST FOR RESOURCES

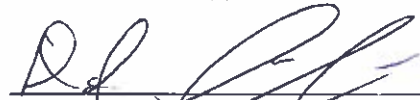

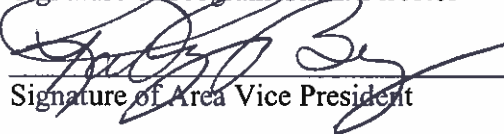
PROGRAM/DEPARTMENT AG/ENVS

ACADEMIC YR. 2011-2012

Comprehensive Program Review Annual Assessment Request for Resources (check all that apply)

Please analyze your Program Review data as well as your SLO/SAO assessment findings in order to update to your Comprehensive Program Review report as needed. All changes to area needs and subsequent requests for additional resources must be reported at this time.

If your program is scheduled for a Comprehensive Program Review all forms are to be completed and submitted to the appropriate Dean/VP. If you are completing the annual Program Review Assessment only and have no changes to area needs, sign below and submit this form to appropriate Dean/VP. If your needs have changed as a result of your annual assessment of program review data, please complete the appropriate Request for Resources form(s) and submit to appropriate Dean/VP.

	<u>3/23/12</u>		<u>3/23/12</u>
Signature of Program Chair/Director	Date	Signature of Area Dean	Date
	<u>3/23/12</u>		
Signature of Area Vice President	Date		

Please attach the following documents to this Program Review Compliance form if you are requesting additional resources:

- ✓ Comprehensive Program Review
- ✓ Data Analysis Form
- ✓ SLO/SAO Assessments
- ✓ Request for Resources Forms

Part 2 – Comprehensive Program Review Fall 2011

Program Name:

Agriculture Science/Environmental Science

A. A. PAST: Review of Program Performance, Objectives, and Outcomes for the Three Previous Academic Years Ending 2009, 2010, 2011

1. List the objectives developed for this program during the last comprehensive program review.

GOAL ONE: (Student Success): Enable students' success through demonstrated competency of identified Student Learning Outcomes and attainment of their educational goals, including degrees and certificates, transfer and basic skills.

GOAL TWO: (Student Retention): Develop and implement strategies to improve student retention.

2. Present program performance data in tabular form for the previous three years that demonstrates the program's performance toward meeting the previous objectives. Include the following standard program performance metrics as well additional program specific metrics, if any.
 - a. For teaching programs this data should include at least the following: Enrollment at census, number of sections, fill rate, retention rate, success rate, and grade distribution for each course in the program, during each semester and session of the previous three academic years. In addition, the Full Time Equivalent Faculty (FTEF) and Full Time Equivalent Students (FTES) and the ratio of FTES per FTEF should be presented for the program for each semester and session.

See end of report for attached reports beginning with the title: Program Review – Agricultural Science (AG) Program and the following analysis.

**Program Review – Agricultural Science (AG) Program
Enrollment Count at Census**

Course	Fall			Fall Avg	Spr.			Spr. Avg.	Sum.		Sum. Avg.	Win.		Win. Avg.	Total
	2008	2009	2010		2009	2010	2011		2009	2010		2009	2010		
AG080					10	10	25	45							45
AG101	16			16											16
AG110	60	77	44	181	68	81	61	210	14		14	9		9	414
AG120	7	17		24											24
AG130			27	27											27
AG134							29	29							29
AG138		13		13											13
AG140	5	11	34	50											50
AG160	10		32	42											42
AG170			15	15	18	30		48							63
AG220		8		8											8
AG230					6	18	23	47							47
AG240					5	11		16							16
AG250	6	12		18			37	37							55
AG260		24		24											24
AG270					6	12		18							18
ENVS110	269	181	219	669	192	207	168	567	23		23	10		10	1269
>>>>	373	343	371	1087	305	369	343	1017	37		37	19		19	2160

No. of Sections

Course	Fall			Fall Avg	Spr.			Spr. Avg.	Sum.		Sum. Avg.	Win.		Win. Avg.	Total
	2008	2009	2010		2009	2010	2011		2009	2010		2009	2010		

AG134							69.0%	69.0%							69.0%
AG138		92.3%		92.3%											92.3%
AG140	100.0%	72.7%	82.4%	85.0%											85.0%
AG160	80.0%		93.8%	86.9%											86.9%
AG170			66.7%	66.7%	100.0%	100.0%		100.0%							88.9%
AG220		62.5%		62.5%											62.5%
AG230					66.7%	72.2%	43.5%	60.8%							60.8%
AG240					40.0%	63.6%		51.8%							51.8%
AG250	83.3%	50.0%		66.7%			73.0%	73.0%							68.8%
AG260		83.3%		83.3%											83.3%
AG270					33.3%	58.3%		45.8%							45.8%
ENVS110	54.6%	63.5%	65.3%	61.2%	65.1%	65.7%	59.5%	63.4%	87.0%		87.0%	80.0%		80.0%	67.6%
>>>>	79.4%	72.3%	74.4%	75.3%	64.3%	71.3%	65.2%	67.0%	89.9%		89.9%	90.0%		90.0%	72.9%

Retention Rate

Course	Fall			Fall Avg	Spr.			Spr. Avg.	Sum.		Sum. Avg.	Win.		Win. Avg.	Avg.
	2008	2009	2010		2009	2010	2011		2009	2010		2009	2010		
AG080					80.0%	80.0%	92.0%	84.0%							84.0%
AG101	93.8%			93.8%											93.8%
AG110	78.3%	90.9%	88.6%	86.0%	94.1%	86.4%	88.5%	89.7%	92.9%		92.9%	100.0%		100.0%	90.0%
AG120	100.0%	94.1%		97.1%											97.1%
AG130			85.2%	85.2%											85.2%
AG134							82.8%	82.8%							82.8%
AG138		92.3%		92.3%											92.3%
AG140	100.0%	81.8%	100.0%	93.9%											93.9%
AG160	80.0%		93.8%	86.9%											86.9%
AG170			100.0%	100.0%	100.0%	100.0%		100.0%							100.0%

AG134	Spr.	2011	15	5			4			0	5	29	69.0%	82.8%
AG138	Fall	2009	6	5	1					0	1	13	92.3%	92.3%
AG140	Fall	2008	2	2	1					0		5	100.0%	100.0%
AG140	Fall	2009	3	2	3		1			0	2	11	72.7%	81.8%
AG140	Fall	2010	11	16	1		6			0		34	82.4%	100.0%
AG160	Fall	2008	4	1	3					0	2	10	80.0%	80.0%
AG160	Fall	2010	30							0	2	32	93.8%	93.8%
AG170	Spr.	2009	17	1						0		18	100.0%	100.0%
AG170	Spr.	2010	10	11	9					0		30	100.0%	100.0%
AG170	Fall	2010	3	3	4	2	3			0		15	66.7%	100.0%
AG220	Fall	2009	2	3			2			0	1	8	62.5%	87.5%
AG230	Spr.	2009	1	3						0	2	6	66.7%	66.7%
AG230	Spr.	2010	12	1		1				0	4	18	72.2%	77.8%
AG230	Spr.	2011	4	4	2		2			0	11	23	43.5%	52.2%
AG240	Spr.	2009	1	1			2			0	1	5	40.0%	80.0%
AG240	Spr.	2010	2	3	2		1			0	3	11	63.6%	72.7%
AG250	Fall	2008		4	1					0	1	6	83.3%	83.3%
AG250	Fall	2009	2	1	3		2			0	4	12	50.0%	66.7%
AG250	Spr.	2011	15	11	1		7			0	3	37	73.0%	91.9%
AG260	Fall	2009	10	8	2					0	4	24	83.3%	83.3%
AG270	Spr.	2009	1	1		1	1			0	2	6	33.3%	66.7%
AG270	Spr.	2010	4	2	1		1			0	4	12	58.3%	66.7%
ENVS110	Fall	2008	20	55	72	21	43			0	58	269	54.6%	78.4%
ENVS110	Win.	2009	1	5	2		1			0	1	10	80.0%	90.0%
ENVS110	Spr.	2009	42	52	31	8	34			0	25	192	65.1%	87.0%
ENVS110	Sum.	2009	10	10			3			0		23	87.0%	100.0%
ENVS110	Fall	2009	57	34	24	10	34			0	22	181	63.5%	87.8%
ENVS110	Spr.	2010	32	65	39	8	46			0	17	207	65.7%	91.8%
ENVS110	Fall	2010	38	50	55	19	29			0	28	219	65.3%	87.2%

	2008	2009	2010		2009	2010	2011		2009	2010		2009	2010		Total
AG 080					0.1	0.1	0.1	0.2							0.2
AG 101	0.2			0.2											0.2
AG 120	0.3	0.3		0.7											0.7
AG 130			0.2	0.2											0.2
AG 134							0.2	0.2							0.2
AG 138		0.3		0.3											0.3
AG 140	0.4	0.4	0.4	1.2											1.2
AG 160	0.2		0.2	0.4											0.4
AG 170			0.3	0.3	0.3	0.3		0.7							1.0
AG 220		0.3		0.3											0.3
AG 230					0.2	0.2	0.2	0.6							0.6
AG 240					0.4	0.4		0.8							0.8
AG 250	0.2	0.2		0.4			0.2	0.2							0.6
AG 260		0.2		0.2											0.2
AG 270					0.2	0.2		0.4							0.4
ENVS 110	2.0	1.6	1.8	5.4	2.0	1.8	1.6	5.4	0.2		0.2	0.2		0.2	11.2
>>>>	3.3	3.4	2.9	9.7	3.2	3.0	2.3	8.5	0.2		0.2	0.2		0.2	18.5

FTEs per FTEf

Course	Fall			Fall Avg	Spr.			Spr. Avg.	Sum.		Sum. Avg.	Win.		Win. Avg.	Avg.
	2008	2009	2010		2009	2010	2011		2009	2010		2009	2010		
AG 080					4.6	4.6	11.4	6.9							6.9
AG 101	8.3			8.3											8.3
AG 120	3.5	8.4		5.9											5.9
AG 130			14.0	14.0											14.0
AG 134							15.0	15.0							15.0
AG 138		6.4		6.4											6.4

1. Demonstrate an understanding of fundamental concepts and knowledge related to the management, marketing and production of various agriculture commodities produced for food, feed & fiber.

Way(s) to assess: exams, laboratory practical, laboratory exercises, class presentations, and/or homework assignments

2. Display competency with respect to understanding and use of standard business practices and strategies commonly used in production, sales, marketing distribution.

Way(s) to assess: exams, reports and/or class presentations

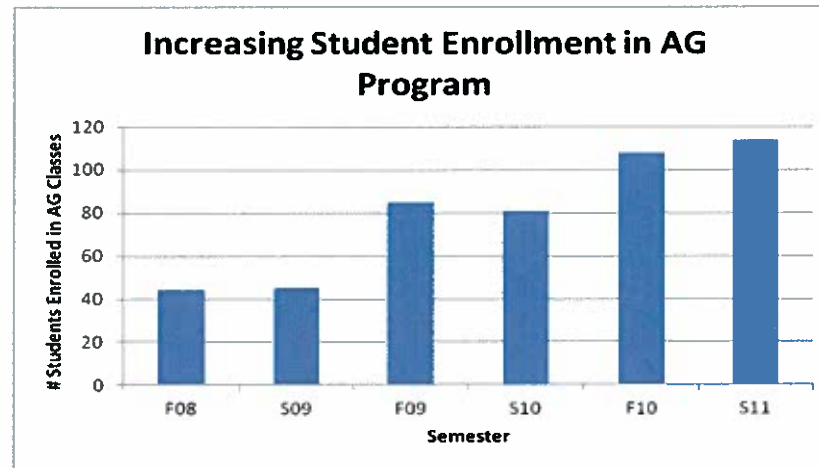
3. Demonstrate understanding of market trends and influential factors, display critical thinking skills related to production and marketing development, data interpretation as applied to the decision making process related to commercial production and commodity sales.

Way(s) to assess: exams, reports, class presentations and/or assignments

The successful attainment of these program level outcomes requires that students be skilled in virtually all of the institutional learning outcomes. To master the program outcomes information literacy, personal accountability, critical thinking, awareness of world markets, global weather patterns and political conditions must be monitored. Lastly, effective communication in collecting data as well as transferring information must be mastered. The identified program outcomes very much reinforce institutional learning outcomes as well as require student competency in institutional outcomes to satisfactorily facilitate aptitude in the program learning outcomes.

Limitations of current equipment, land and facilities (shop) do limit the fullest implementation and development of these learning outcomes.

As program learning outcomes were created in fall 2011 and are currently being assessed, there is no data yet on these outcomes for the programs listed above.



As program learning outcomes were created in Fall 2011 and are currently being assessed, there is no data yet on these outcomes for the agriculture programs.

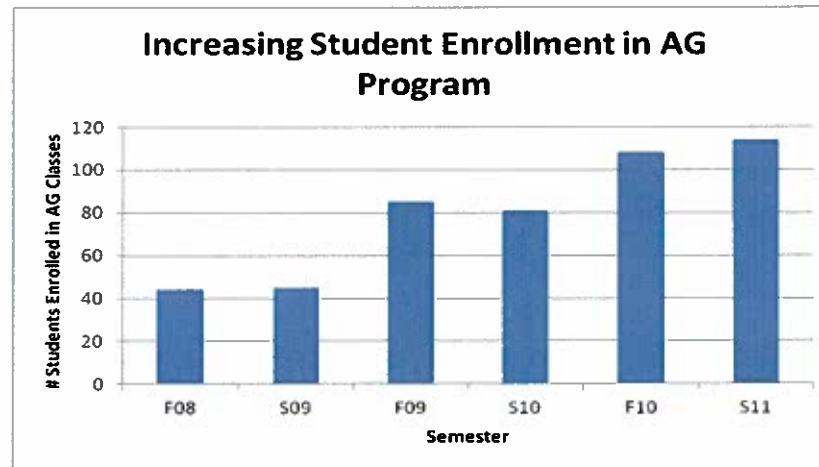
Enrollment and Sections:

AG classes are offered on a two year cycle with only a few repeating in the timeframe of the CPR report, academic years ending 2009, 2010, 2011. As noted in this CPR report there has been an increase in total enrollments in the AG classes; AG 110 has increased from 60 in Fall 08 to 68 Spring 09, 77 in Fall 09 to 81 in Spring 10, and from 44 in Fall 10 to 61 in Spring 11. While AG 170 had 30 students in Spring 10 and 15 in Fall 10, the total numbers in the 3 year cycle was up. AG 250 had 12 students in Fall 2009 and 37 in Spring 2011. The gains in enrollment were made when the total number of sections decreased by two in the same three year period.

B. PRESENT: Snapshot of the State of the Program in the Current Semester: Fall 2011

1. Give a verbal description of the program as it exists at the present time. Include information on current staffing levels, current student enrollments, student learning or service are outcome implementation, number of majors, and/or other data as appropriate.

At present the program continues to show growth. Student enrollment has increased every semester for the past eight semesters. Spring semester of 2012 will offer the fourth and final core Agriculture Business course and thereby complete the first full cycle of courses that has been offered in several years for the business option.



Similarly, enrollment in the Agriculture Science degree and certificate courses continues to increase. All indications are very positive that the need and demand for both of these degree options will continue. In fact it is likely that the third and fourth degree options (Ag Mechanics & Animal Science) previously offered at Imperial Valley College will again be viable solutions to regional industry needs.

Subsequent to the end of the next review period but before the completion of the 2015-17 review period it is expected that all instructional infrastructure would be completed. This would include classroom/instructional laboratories, equipment maintenance/instruction shop, livestock handling/barns, greenhouse/shade house, algae ponds and faculty office. At this time adequate machinery, implements, tools and lab equipment should have been procured and ready to be put into service.

2. Identify how student learning or service area outcomes will be expanded and fully implemented into the program. Include a progress timeline for implementation and program improvement.

We have created program-level SLOs in the fall 2011 semester, and are beginning to assess one of them this academic year to begin the process of program improvement.

3. Identify any resources needed to accomplish these objectives. Identify any obstacles toward accomplishment and the plan to surmount these obstacles.

It is hoped that in the next 3 to 5 years a full instructional facility can be brought to fruition. Indications are that sole district efforts to achieve this need will not be likely for some 10 to 12 years. That simply will not accommodate the full potential of this program in a reasonable time line. Therefore a collaborative effort between the district, industry, the IID, the state and the county will be necessary to achieve the goal of a regional agricultural education facility.

*Resources that are needed to fully accomplish the goals and objectives and provide for satisfaction of a fully prepared student will include:

1. Four hundred acres of land, at least 350 of which is of a quality suitable for cropping
2. Infrastructure facilities that include:
 - a. Classroom/lab/office building
 - b. Machine storage shaded
 - c. Machine maintenance & fabrication instruction shop – equipped with tools & safety equipment

- d. Greenhouse/shade house
- e. Livestock handling barns and equipment
 - i. Beef/sheep
 - ii. Swine
- f. Designated forage/pasture area
- g. Grain/vegetable crop area
- h. Vineyard/orchard area
- i. Algae pond for protein/renewable fuel production
- j. Feed processing building/mill
- k. (1) 260 HP class tractor
- l. (2) 140 HP class tractors
- m. (2) Windrowers
- n. (1) Rake
- o. (2) Bailers
- p. (1) Stubble disc
- q. (1) Finish disc
- r. (1) Border disc
- s. (1) Border buster disc
- t. (1) Planter
- u. (1) Harrowbed
- v. (1) Crew cab pick up
- w. (1) Gooseneck stock trailer
- x. (1) Medium duty gooseneck flatbed trailer
- y. Other implements and equipment as need is determined

*A limited amount of this equipment has already been procured by the program.

At this time the only obstacle is available funding. As the district has undertaken several projects in the past three years the available recourses for expansion have been dedicated to other needs. As it is unlikely that any

4. Identify any outside factors that might influence your program during the next three years.

It is anticipated that the program will continue to grow in student enrollment. The second degree program (Ag Business) was reintroduced starting fall 2010. This is the last reintroduction of degree programs that is possible given the facilities that are currently available. The remaining two degree options that were formerly offered at IVC (Animal Science & Mechanized Ag) cannot be reinitiated without restoration of previous facilities. The reintroduction of the Ag Business degree option was in response to student demand. This option is solely classroom facilitated and was therefore feasible to bring back on line and capture student market share. These two factors had positive impact on the program and are expected to continue as such.

To fully meet the objectives of the agronomy focused degree option further acquisition of equipment and maintenance/instruction facilities will be required. To continue on in the current status may in time detract from the program.

One of the largest sectors of four year agriculture programs is that of animal science/pre-veterinary study. That would be the most likely avenue to pursue next along with mechanized agriculture. At current I have had several students express that they are interested in these areas of study. In the continued absence of facilities to accommodate these last two areas of study there will result a loss of potential student clientele to this program.

We have an amazing industry in this valley that needs trained and motivated personnel to operate it. The growing season and livestock production capabilities of Imperial are like nearly no other place in the world. That indigenous resource needs to be capitalized upon. Additionally, the very thing that makes for production also hinders the valley. The heat makes it a place that is not commonly a first pick to come to from other climates. Having a premier agriculture instructional facility here would both serve to provide local students training needed to be successful producers and managers as well as provide a unique learning opportunity for students from other parts of the state and beyond.