

The purpose of Program Planning and Assessment at Hartnell College is to obtain an honest and authentic view of a program and to assess its strengths, opportunities, needs, and connection to the mission and goals of the college. The process is based on the premise that each academic program reviews assessment data and uses these data to plan for improvement. The results of these annual cycles provide data for a periodic (every five years) comprehensive review

B. INSTRUCTIONAL STAFFING

1. In the table below enter the number of sections offered and the number of full time and adjunct faculty in your program /discipline by term over the past several years .

2. What staffing factors /challenges have

C. CTE PROGRAMS LABOR MARKET & ACHIEVEMENT

Please complete this section if the program is Career Technical Education (CTE). Go to subsection D if the program is not CTE.

1. Describe the demonstrated effectiveness on the program over the past several years with levels and trends of achievement data, including degree/ certificate completions (awards) and employment statistics.

[Begin response here]

2. Describe the number of, activities of, and recommendations resulting from advisory committee meetings that have occurred over the past two years. What information and/or data were presented that required or currently require changes to be made to your program?

(Please attach copies of meeting minutes over the past two years and a list of committee members and their respective industries /areas.)

[Begin response here]

3. Does labor market data and/or the need for additional education indicate that changes should be made to your program? Does the program (continue to) meet a labor market demand and/or fulfill an important step toward higher/additional education?

[Begin response here]

D. PROGRAM G

This section must be completed for ALL academic programs, including those scheduled for a comprehensive review in spring 2014 .

A. COURSE DATA & TRENDS

1. Please evaluate the 3 -year trend of enrollment and success of courses in your program/ discipline. Identify the courses you are choosing to examine this current year in the list below. You do NOT need to evaluate trends for each course every year.

Course Number	Course Name	Does the course have ny DE (online or hybrid) sections?
3A	Analytic Geometry and Calculus I	No
3C	Analytic Geometry and Calculus III	No
4	Linear Algebra	No
121	Elementary Algebra	Yes

Please use the data that have been provided. Analyze trends that you observe with respect to the data for the identified courses and answer the following questions .

ENROLLMENT

2. Review the enrollment data. Describe and analyze any patterns or anomalies that you notice . What do you make of these patterns or anomalies? What actions should be taken to ensure continuous improvement ?

For Math121, our enrollments are much higher in the fall than in the spring. One reason for this anomaly is the fact that we get a big influx of high school students during the falls. This also means that many high school students who have already taken Elementary Algebra (Algebra 1 and 2) are placing at a level that is lower or the same than the last math class they took. As a department, we want to work with the high schools to better articulate their curriculum with

The success rate for Math 3C is slightly higher in the fall semesters than in the spring semesters. One possible explanation is that students taking Math 3C in the fall are not concurrently enrolled in Math 4, so this group of students is having a less challenging time compared to students who are potentially enrolled in both Math 3C and Math 4 in the spring semesters. Starting in Spring 2014 Math 3C and Math

B. TEACHING MODALITY

1. Enter the number of Distance Education Courses, both fully online and hybrid sections, along with the number of full-time and adjunct faculty.

Term	No. of DE/ Online Sections	No. of Hybrid Sections	Full- time Faculty	Adjunct Faculty
Summer 201	3	30 (L series)	2	2
Fall 201:	4	45 (L series)	4	2
Spring 201	3	90 (L series)	4	2

2. Compare student success in the DE teaching environment with success in the face-to-face teaching environment in the same course. Are there differences? To what do you ascribe the differences in your program? Discuss any other relevant factors regarding diverse teaching modalities and environments, such as specific locations.

For Prealgebra and Elementary Algebra, success rates in the traditional lecture sections (Math 201 and 121, respectively) and in the hybrid module of the corresponding L series sequences (Math 201L3 and Math 121L4 respectively) have been roughly the same over the last several semesters. For Intermediate Algebra, success rates in the lecture sections (Math 123) have been somewhat higher than in the last module of the corresponding L series sequence (Math 123L4).

We need ways such as the kind of support a Math Learning Center would provide to help students nearing the end of Intermediate Algebra in the L series maintain their forward progress and complete the course.

There are three courses that are offered both in fully online and face-to-face modalities, namely Math 121 (Elementary Algebra), Math 123 (Intermediate Algebra), and Math 13 (Elementary Statistics). Unfortunately, the data needed in order to compare success and retention rates for those modalities on a course-by-course basis was not available to us, so we instead did an overall comparison of face-to-face classes to DE classes.

A comparison of the overall retention rates in face-to-face versus online math classes showed that face-to-face retention rates were roughly 10 percent higher than online retention rates. A similar examination of overall success rates in face-to-face versus online math classes showed no clear correlation between success rate and teaching modality (face-to-face versus online).

3. Describe the process to change and improve student success in DE courses/sections in your program, and any other relevant factors regarding diverse teaching modalities and environments, such as specific locations.

This is a process we need to discuss further as a department and put into writing. However, various methods are already in use to increase success in these classes. One such method is the use of online video tutorials created by members of the department to go along with the online course.

We need to do a better job of advising students about the expectations of online math classes. Many students who take math classes could benefit from in-person lectures and dynamic classroom discussions, but choose to take classes online because of factors such as

Courses scheduled for
review during AY 2014-
15

Faculty member(s)

D. OUTCOMES

Use your Program Outcome Map

List Program level outcome(s) scheduled for assessment in AY 14-15	Have your course level SLOs needed for this program level outcome been assessed or scheduled for assessment?
Upon successful completion 1a: apply derivatives and	Yes

1c: cons12 112.08 2.45 TJ482(al)7.6t05.(82(as.2 1965.2 705.12 | 90.24 730450 00.24 660.9

CORE COMPETENCIES

3. Describe how Core Competencies were specifically addressed by the program/discipline during the past year. For example, were data gathered at the course level? Was there review and analysis of the data? How did the

Math 123L1 (Elementary Algebra, Level 1)	Leti Contreras	Spring 2015
Math 123L2 (Elementary Algebra, Level)2	Leti Contreras	Spring 2015
Math 123L3 (Elementary Algebra, Level)3	Leti Contreras	Spring 2015

E. PREVIOUSLY SCHEDULED ACTIVITIES

This subsection focuses on activities that were previously scheduled. An activity can address many different aspects of your program/discipline, and ultimately is undertaken to improve or enhance your program/discipline, and keep it current.

Activity scheduled	What success has been achieved to date on this activity?	What challenges existed or continue to exist?	Will activity continue into AY 14-15?	Will activity continue into AY 15-16?*
1. Math Academy	This grant funded program has grown to 150 students	Funding	Yes	Yes
2. youtube.com/hartnellcollegemath	Free access to over 500 math videos that can be used by instructors and students from Prealgebra to Calculus II.	Promoting the use of the videos	Yes	Yes
3. Supplemental Instruction	Students had the opportunity to attend supplemental instruction	Funding, having enough tutors available to meet the demand	Yes	Yes

* For each activity that will continue into AY 2015-16 and that requires resources, submit a separate resource request in Section III.

1. Evaluate the success of each activity scheduled, including activities completed and those in progress. What measurable outcomes were achieved? Did the activities and subsequent dialogue lead to significant change in student learning or program success?

Metrics do not currently exist to measure outcomes for these activities. It may be possible in the future to track Math Academy cohorts.

This section must be completed for ALL academic programs, whether scheduled for annual or comprehensive review in spring 2014.

A. NEW ACTIVITIES

This subsection addresses new activities for, and continuing new activities into, AY 2015 -16. An activity can address many different aspects of your program/discipline, and ultimately is undertaken to improve, enhance, and or keep your program/discipline area current. A new activity may or may not require additional resources. Activities can include but are not limited to:

- NEW CURRICULUM
- FURTHER DEVELOPMENT OF THE PROGRAM OR SERVICE
- GRANT DEVELOPMENT AND PROPOSALS
- FACULTY AND STAFF TRAINING

*** Please complete this page for each new activity.

Activity 1: Math Learning Center

2. This item is used to describe how the new activity, or continuing new activity, will support the program/discipline .

Consider:

- Faculty
- Other staffing
- Facilities
- Equipment (non -

Strategic Goals 2A and 2B: The Math Learning Center will do exactly what those two strategic priorities call for, specifically in the area of mathematics: it will be an example of a supportive, innovative, and collaborative learning environment that will help students pursue and achieve

*** Please complete this page for each new activity. ***

Activity 2: Strengthening communication to improve student success, retention and outreach

2. This item is used to describe how the new activity, or continuing new activity, will support the program/discipline.

Consider:

- Faculty
- Other staffing
- Facilities
- Equipment (non -expendable, greater than \$5,000), supplies (expendable, valued at less than \$5,000),
- Software
- Hardware
- Outside services
- Training
- Travel
- Library materials
- Science laboratory materials

- a) Describe the new activity or follow -on activity that this resource will support.

Strengthening communication is an area that would positively impact awareness among adjunct math instructors, current students, and prospective students equally. Clear expectations, services and resources available are intended to be disseminated through a central location. Furthermore, we would expand our services to include outreach to prospective students by communicating expectations regarding our placement policies. In addition enrichment events to support our current STEM students would serve to help with success and retention rates.

- b) Describe how this activity supports any of the following:
- 1) Core Competency
 - 2)

StrategicGoal5A: This activity will "provide ... services that are relevant to the real world needs of its diverse student population" as stated in this strategic priority.

StrategicGoal6A: This activity supports this strategic priority through the outreach that is proposed for prospective students to communicate our placement policies and thus contribute to the "strengthening and filtering of [our] current partnerships...between the college and the

StrategicGoal5A: Thisactivity

B. RESOURCE REQUESTS

If new/additional resources are needed for your program/discipline, it is important that you identify them and project their cost, and that these resources and costs be considered through the Colleges integrated planning (governance, budget development, funding decision making, and resource allocation) processes. A resource is likely to be something needed to support an activity that you have identified.

*

Priority 5 : Innovation and Relevance for Programs and Services

Goal 5A: