**Bakersfield College**

**Program Review – Annual Update**

**I. Program Information:**

Program Name: Office of the Dean (Mathematics, Sciences, Academic Development)

Program Type:  Instructional  Student Affairs  Administrative Service

***Bakersfield College Mission****:* Bakersfield College provides opportunities for students from diverse economic, cultural, and educational backgrounds to attain Associate and Baccalaureate degrees and certificates, workplace skills, and preparation for transfer. Our rigorous and supportive learning environment fosters students’ abilities to think critically, communicate effectively, and demonstrate competencies and skills in order to engage productively in their communities and the world.

Describe how the program supports the Bakersfield College Mission:

As a unit of Academic Affairs, the mission of the Office of the Dean of Mathematics and Sciences is to provide leadership in the development and evaluation of instructional programs, academic support services, faculty, and curriculum to ensure integrity and excellence of academics in mathematics and science related disciplines at Bakersfield College.

Program Mission Statement:

Bakersfield College provides opportunities for students from diverse economic, cultural, and educational backgrounds to attain degrees and certificates, workplace skills, and preparation for transfer. Our rigorous and supportive learning environment fosters students’ abilities to think critically, communicate effectively, and demonstrate competencies and skills in order to engage productively in their communities and the world. The Office of the Dean of Mathematics, Sciences, and Academic Development embraces the core values of the College:

* promoting rigorous **learning** standards that are presented in a fashion that maximize student success.
* approaching all decisions with **integrity**.
* assuring student, faculty, and staff **wellness** through appropriate safety and training,
* embracing **diversity** with equity with targeted efforts such as MESA.
* serving the BC **community** with a voice for students, faculty, and staff in our processes and outreach to secondary education, transfer institutions, and local employers.
* enhancing **sustainability** through professional development and grant and partnership funding of capital improvements.

**II. Progress on Program Goals:**

1. List the program’s current goals. For each goal (minimum of 2 goals), discuss progress and changes. If the program is addressing more than two (2) goals, please duplicate this section.

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| **Program Goal** | **Which institutional goals from the Bakersfield College Strategic Plan will be advanced upon completion of this goal? (select all that apply)** | **Progress on goal achievement**  **(choose one)** | **Comments** |
| 1. Evaluate and update pre-collegiate curriculum. | 1: Student Learning  2: Student Progression and Completion  3: Facilities  4: Oversight and Accountability  5: Leadership and Engagement | Completed: \_\_\_\_\_\_\_\_\_\_ (Date)  Revised: \_\_\_\_\_\_\_\_\_\_ (Date)  Ongoing: \_\_\_\_\_\_\_\_\_\_ (Date) | Math B65 was developed as an accelerated route to transfer-level MATH B22 and PSYC B5. Efforts to restructure the MathLab courses and compressed completion options for ACDV B72 are in progress. |
| 2. Develop a variety of summer bridge options. | 1: Student Learning  2: Student Progression and Completion  3: Facilities  4: Oversight and Accountability  5: Leadership and Engagement | Completed: \_\_\_\_\_\_\_\_\_\_ (Date)  Revised: \_\_\_\_\_\_\_\_\_\_ (Date)  Ongoing: \_\_\_\_\_\_\_\_\_\_ (Date) | Summer Bridge was expanded and focused on MetaMajors in summer 2016. Title V grant funds will be used to make this course standard practice for incoming students from high schools in summer 2017. |
| 3. Support departments to expand academic engagement initiatives like thematic learning communities and service learning. | **X** 1: Student Learning  2: Student Progression and Completion  3: Facilities  4: Oversight and Accountability  5: Leadership and Engagement | Completed: \_\_\_\_\_\_\_\_\_\_ (Date)  Revised: \_\_\_\_\_\_\_\_\_\_ (Date)  **X** Ongoing: \_\_\_\_\_\_\_\_\_\_ (Date) | The math department continues to support developmental-level learning communities to allow students to complete multiple math courses in the same semester. They also promote service learning with their active student Math Club. A new Chemistry Club was started in the 2015-16 academic year. |
| 4. Manage the faculty evaluation and improvement process. | 1: Student Learning  2: Student Progression and Completion  3: Facilities  **X** 4: Oversight and Accountability  5: Leadership and Engagement | Completed: \_\_\_\_\_\_\_\_\_\_ (Date)  Revised: \_\_\_\_\_\_\_\_\_\_ (Date)  **X** Ongoing: \_\_\_\_\_\_\_\_\_\_ (Date) | The office has scheduled and conducted faculty evaluations following the CCA agreement. |
| 4. Develop and manage a budget that supports the needs of the unit while maintaining the financial integrity of the college. | 1: Student Learning  2: Student Progression and Completion  **X** 3: Facilities  4: Oversight and Accountability  5: Leadership and Engagement | Completed: \_\_\_\_\_\_\_\_\_\_ (Date)  Revised: \_\_\_\_\_\_\_\_\_\_ (Date)  **X** Ongoing: \_\_\_\_\_\_\_\_\_\_ (Date) | The office has submitted a budget that matches growth and instructional improvement with needed funds. As the departments expand service to both main campus and BC sites, the need for supplies and travel are increasing. Request for additional funds has been limited to core needs. |
| 5. Increase student participation in academic support services. | 1: Student Learning  **X** 2: Student Progression and Completion  3: Facilities  4: Oversight and Accountability  5: Leadership and Engagement | Completed: \_\_\_\_\_\_\_\_\_\_ (Date)  Revised: \_\_\_\_\_\_\_\_\_\_ (Date)  **X** Ongoing: \_\_\_\_\_\_\_\_\_\_ (Date) | The office supports student advising and counseling through the STEM, MESA, Title V, and Basic Skills programs, which are grant-funded. These programs connect students directly to dedicated advisors, academic tutors, and transfer advisors. The office has started and will expand Basic Skills Extended Classrooms through the year. |
| 6. Evaluate and expand accelerated and compressed curriculum. | 1: Student Learning  **X** 2: Student Progression and Completion  3: Facilities  4: Oversight and Accountability  5: Leadership and Engagement | Completed: \_\_\_\_\_\_\_\_\_\_ (Date)  Revised: \_\_\_\_\_\_\_\_\_\_ (Date)  **X** Ongoing: \_\_\_\_\_\_\_\_\_\_ (Date) | The math department offers compressed “late start” developmental courses through the Math Learning Center. An additional ACDV B72 compressed course is being development for pilot in Fall 2017. |
| 7. Ensure the alignment of curriculum to state  C-IDs, submission of an AS-T in Chemistry, and accuracy of current curriculum. | 1: Student Learning  **X** 2: Student Progression and Completion  3: Facilities  4: Oversight and Accountability  5: Leadership and Engagement | Completed: \_\_\_\_\_\_\_\_\_\_ (Date)  Revised: \_\_\_\_\_\_\_\_\_\_ (Date)  **X** Ongoing: \_\_\_\_\_\_\_\_\_\_ (Date) | The chemistry and biology AS-T programs were submitted in the 2015-16 academic year and are being finalized at the State level. |

1. List new or revised goals (if applicable)

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| --- | --- | --- |
| **New/Replacement Program Goal** | **Which institutional goals will be advanced upon completion of this goal? (select all that apply)** | **Anticipated Results** |
|  | 1: Student Learning  2: Student Progression and Completion  3: Facilities  4: Oversight and Accountability  5: Leadership and Engagement |  |

**III. Trend Data Analysis:**

Highlight ***any significant changes*** in the following metrics and discuss what such changes mean to your program.

1. Changes in student demographics (gender, age and ethnicity). The demographics of the departments within the instructional unit remained essentially constant over the year.
2. Changes in enrollment (headcount, sections, course enrollment and productivity).

Headcount: 201570 – 12,065 to 201670 – 10,854

Sections: 201570 – 322 to 201670 – 322

FTES: 201570 – 1557.0 to 201670 – 1550.5

FTEF: 201570 – 84.8 to 201670 – 88.6

FTES/FTEF: 201570 – 18.5 to 201670 – 17.5

Decrease from 201570 to 201670 is predominately from having more late start sections of ACDV and MATH courses this semester that have not yet reached their census enrollment dates.

1. Success and retention for face-to-face, as well as online/distance courses.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 0 | 0 | Sections | **Retention Rate** | **Success Rate** |
| **2015-16** | 201630 | 310 | 82.6% | 56.7% |
|  | 201570 | 317 | 83.6% | 57.6% |
|  | 201550 | 99 | 88.6% | 71.3% |
|  | **Sum** | **726** | **83.7%** | **58.8%** |
| **2014-15** | 201530 | 306 | 84.9% | 59.0% |
|  | 201470 | 302 | 82.6% | 57.8% |
|  | 201450 | 76 | 85.8% | 67.8% |
|  | **Sum** | **684** | **83.9%** | **59.4%** |
| **2013-14** | 201430 | 287 | 85.2% | 60.8% |
|  | 201370 | 291 | 82.1% | 56.9% |
|  | 201350 | 77 | 85.7% | 66.9% |
|  | **Sum** | **655** | **83.8%** | **59.6%** |
| **2012-13** | 201330 | 291 | 81.8% | 56.4% |
|  | 201270 | 282 | 83.3% | 59.7% |
|  | 201250 | 66 | 86.0% | 69.1% |
|  | **Sum** | **639** | **82.9%** | **59.1%** |

1. Other program-specific data that reflects significant changes *(please specify or attach).* All Student Affairs and Administrative Services should respond.

Using the latest Achieve the Dream data, disproportionate impact continues for African American and Native American students in mathematics. Some improvements have been seen for the Hispanic population, except male students, who lag behind in successfully completing developmental mathematics courses. The mathematics department is working with the Equity Committee to find new solutions to this continuing issue. Two new math fulltime tutors were hired to try to address Equity issues with developmental mathematics courses.

The office is managing new grants to support academic services for Basic Skills, including a Title V grant for $2.6 Million and a Basic Skills Transformation grant for $1.5 Million. These have been used to expand Summer Bridge and create new Extended Classrooms with additional learning support services for ACDV B72, MATH B60, and ENGL B53.

**IV. Program Assessment (focus on most recent year):**

Use attached **Assessment Report Form AU Tab**

1. Describe *any significant changes* in your program’s strengths since last year.

The faculty and department chairs in Mathematics, Physical Sciences, and Biology have begun to meet to develop ways to improve STEM student success and completion through development of curriculum maps.

The department chairs for Mathematics and Academic Development have begun to coordinate their course content to be more effective for students starting in the lowest levels of math courses at BC.

A transfer agreement for Biology students to the California Health Sciences University’s Pharmacy Program was finalized.

1. Describe *any significant changes* in your program’s weaknesses since last year.

The College continues to struggle to have several science courses not transfer to CSU Bakersfield.

1. If applicable, describe any unplanned events that affected your program.

**V. Assess Your Program’s Resource Needs:** To request resources (staff, faculty, technology, equipment, budget, and facilities), please fill out the appropriate form. <https://committees.kccd.edu/bc/committee/programreview>

1. Human Resources and Professional Development:
2. If you are requesting any additional positions, explain briefly how the additional positions will contribute to increased student success. Include upcoming retirements or open positions that need to be filled.

Faculty positions are prioritized as the following…

1. Mathematics at Delano and supporting Wonderful Academy
2. Chemistry at Delano and supporting Wonderful Academy
3. Physics at the Panorama Campus to support the BS Industrial Automation program
4. Geology at the Panorama Campus
5. Biology at the Panorama Campus
6. Mathematics at the Panorama Campus
7. Professional Development:
8. Describe briefly the effectiveness of the professional development your program has been engaged in (either providing or attending) during the last year, focusing on how it contributed to student success.

The office has developed several professional development events. Those organized by faculty are listed in the program reviews from the departments. Additionally, the office organized Data Coaching training, Excel training sessions, and a customer service training session called “Give Em the Pickle”.

1. What professional development opportunities and contributions can your program make to the college in the future?

Additional Excel training modules will be offered throughout the year.

1. Facilities:
2. How have facilities’ maintenance, repair or updating affected your program in the past year as it relates to student success?

Renovation of to create the new STEM Success Center allows for students to study in a comfortable environment as early as 7:00 am. Before, they were sitting on the floors of hallways in the science and math buildings.

1. How will your Facilities Request for next year contribute to student success?

C. Technology and Equipment:

1. Understanding that some programs teach in multiple classrooms, how has new, repurposed or existing technology or equipment affected your program in the past year as it relates to student success?

Updating of the technology in CSS 117 and CSS 3 have allowed for students to be able to view course content easier.

1. How will your new or repurposed classroom, office technology and/or equipment request contribute to student success?
2. Discuss the effectiveness of technology used in your area to meet college strategic goals.

D. Budget: Explain how your budget justifications will contribute to increased student success for your program.

Budgets have been proposed to consider expansion of courses to Delano towards offering complete programs at that campus.

**VI. Conclusions and Findings:**

Present any conclusions and findings about the program. This is an opportunity to provide a brief abstract/synopsis of your program’s current circumstances and needs.