**Sinclair Community College**

**Continuous Improvement Annual Update 2012-13**

**Please submit to your dean and the Provost’s Office no later than Oct. 1, 2012**

**Department:** 0351 – Mathematics

Year of Last Program Review: FY 2006-2007

Year of Next Program Review: FY 2013-2014

**Section I: Department Trend Data, Interpretation, and Analysis**

**Degree and Certificate Completion Trend Data – OVERALL SUMMARY**

Please provide an interpretation and analysis of the Degree and Certificate Completion Trend Data (Raw Data is located in Appendix A*): i.e. What trends do you see in the above data? Are there internal or external factors that account for these trends? What are the implications for the department? What actions have the department taken that have influenced these trends? What strategies will the department implement as a result of this data?*

The trend here is pretty clear: Every year, only a few people complete an AS degree with an emphasis in Mathematics. There seem to be two possible explanations:

Possible Explanation #1: Not very many students are attempting to complete an AS degree with an emphasis in Mathematics.

Possible Explanation #2: The students who do attempt to complete an AS degree with an emphasis in Mathematics are not succeeding.

My inclination is to think that Explanation #1 is the better explanation, and I believe that course success rate data supports this. The math courses required for the AS degree with an emphasis in Mathematics are MAT 201, MAT 202, MAT 203, MAT 204, MAT 215, and MAT 216. Referring to the table at the end of this document, we see that all of these courses have had success rates of over 50% for each of the last five years. MAT 203, MAT 204, MAT 215, and MAT 216 all have success rates that hover around 70%. The first two courses, MAT 201 and MAT 201, have lower success rates, although their success have been over 60% for the last two years. Also, we have routinely had enough students to run six or more sections of each of these courses every year. So, a relatively large number of students are enrolling in the MAT courses necessary to complete an AS degree with an emphasis in Mathematics, and a majority of these students successfully complete the MAT course that they are currently in every term. Therefore, Explantion #2 does not seem to be the culprit behind the trend of a low number of students completing the math degree. Rather, the issue seems to be that the students taking MAT 201-MAT 216 are majoring in other areas.

This conclusion is not surprising or distressing, as the primary mission of a community college math department is to function as a service department. However, the total number of math degree completers is sufficiently low as to suggest that there may be some untapped opportunities. Currently, the Math Department does not track or routinely advise the students who have declared that they are working on the AS degree with an emphasis in Mathematics (I'll call them math majors). It is our intention in the coming year to begin identifying these students and assigning them advisors from among the faculty in the Math Department. We will look for declared math majors, and also for students taking Calculus who have no declared major. The purpose of this advising will be to help students learn about the opportunities available to them in terms of bachelor's degrees, graduate school, and ultimately, careerwise. This will also give students a mentor who can coach them and and encourage them to stay on track.

Also, as part of our program review next year, I would like to investigate whether there are ways to make our AS degree in Math better align with the first two years of the BS degree in Math at Wright State. There are currently some differences in non-math freshman/sophomore level classes, and this may be causing our math majors to transfer sooner than they would need to. Also, Wright State has a sophomore-level math course (MTH 2800--Introduction to Proof) that math majors and math ed majors take at the end of their second year. We don't have an analagous course, so this too may be causing math majors to leave us before graduating. We had previously run this course as a 297. Perhaps it is time to make it a permanent part of our curriculum.

**Course Success Trend Data – OVERALL SUMMARY**

Please provide an interpretation and analysis of the Course Success Trend Data (Raw Data is located in Appendix A). Looking at the success rate data provided in the Appendix for each course, please discuss trends for high enrollment courses, courses used extensively by other departments, and courses where there have been substantial changes in success.

All high enrollment MAT courses (101, 102, 105, 116, 122) have had consistent success rates. Each courses moves up and down within a 5 percentage-point span with no clear pattern.

All math classes are used extensively by other departments. None of the five highest-enrolled math classes are used in the Math degree program. Even the courses which are used by the Math degree program are used even more by the Engineering Science University Transfer program.

There was a slight upward trend in the success rates for MAT 201 over the last several years. MAT 201 is the first math course required in the Math AS program, and it had been the only MAT course in the Math AS program with success rates consistently below 60%. It is encouraging to see that changed. Unfortunately, it seems that the upward trend in the success rates of MAT 201 is correlated to, and perhaps caused by, a downward trend in the success rates of MAT 117, which is the prerequisite of MAT 201. The department has a strategy going forward to hopefully increase the success rates of MAT 117 (now MAT 1570), and to hopefully do so without decreasing the success rates of MAT 201 (now MAT 2270).

The courses that experienced dramatic swings in success rates over the last five years were low-enrollment courses where such swings might be expected. There were no trends in these swings.

Please provide any additional data and analysis that illustrates what is going on in the department (examples might include accreditation data, program data, benchmark data from national exams, course sequence completion, retention, demographic data, data on placement of graduates, graduate survey data, etc.)

In the fall of 2011, after several years worth of experimentation and pilots, the Math Dept. rolled out a new common structure for all sections of MAT 101. Typically, about 45-50 sections of this course have been offered each quarter, many being taught by adjuncts and often by adjuncts new to Sinclair. In order to create a more consistent experience for students, all instructors were provided with the following materials prepared by the department:

--a detailed syllabus with common policies for attendance, late penalties, making up missed assignments, etc.

--a complete set of homework worksheets

--MyMathLab online homework and quiz assignments for every section

--templates for unit exams

--a daily schedule customized for each section

This change had a modest impact on success rates, which is not entirely surprising--many of the nonsuccessful students in MAT 101 were nonsuccessful for nonacademic reasons that cause them to withdraw officially or unoffically. However, it was also hoped that these changes would help those students that are successful to master even more of the material in MAT 101 so that they will be more prepared for subsequent math classes. Based on the average scores on the MAT 101 Final Exam (which is a multiple-choice test provided by the department for each section), this effect seems to have been achieved.

MAT 101 Final Exam Average Score

2008-09 2009-10 2010-11 2011-12

67.5 67.7 67.5 74.8

A similar change was made to MAT 102 in the winter of 2012. The quarterly data below shows the effect this had on the final exam average (MAT 102 also uses a multiple-choice test provided by the department for all sections).

MAT 102 Final Exam Average

FALL 2009 61.294

WINTER 2010 61.880

SPRING 2010 62.373

FALL 2010 63.743

WINTER 2011 62.506

FALL 2011 65.651

WINTER 2012 69.574

SPRING 2012 72.615

A complicating factor in this data is the fact that the Math Department increased the time allowed for final exams in MAT 101 and MAT 102 in the fall of 2011, and this clearly played some roll in increasing the final exam averages. It is easiest to separate the effect of the time increase from the effect of the new common structure by looking at the MAT 102 quarterly data. For MAT 102, the time increase took effect in Fall 2011, but the common structure was not implemented until Winter 2012.

**Section II: Progress Since the Most Recent Review**

Below are the goals from Section IV part E of your last Program Review Self-Study. Describe progress or changes made toward meeting each goal over the last year.

|  |  |  |
| --- | --- | --- |
| **GOALS** | **Status** | **Progress or Rationale for No Longer Applicable** |
| Continue to work with the college (e.g., the Administrative Withdrawal Policy Pilot Group) to find ways to ensure students have the necessary background to succeed in the course in which they are enrolled and have completed their prerequisites within recommended time limits. | In progress  Completed  No longer applicable | The one-year time-limit policy on prequisites for MAT classes was implemented in 2011-12.  In 2012-13, the college has begun to automatically withdraw students who were allowed to register for a course one term on the basis of being enrolled in the prerequisite in the previous term, if they do not successfully complete the prerequisite. |
| A set of video tapes of Math 101 and 102 will be made available in the Math Lab and Library for students to check out. | In progress  Completed  No longer applicable | These courses no longer exist.  Almost all sections of the corresponding semester courses make use of MyMathLab, which has built-in videos. Therefore, there is no need for a similar iniative on semesters. |
| Improved staffing of the Math Lab and Math Help Room is required to better serve students during peak hours. An additional student worker in the Math Lab who could cross over to the Help Room when needed would make a significant impact on the quality of service offered. | In progress  Completed  No longer applicable |  |
| Bookmarks with information such as study tips and Math Lab hours will be printed and distributed to students. | In progress  Completed  No longer applicable |  |
| Review packets of material for the AMATYC Student Mathematics Competition will be prepared and students will be able to attend a “debriefing” session after the exam. | In progress  Completed  No longer applicable |  |
| In order to improve the screening process we will require each part-time faculty applicant to make a brief presentation. | In progress  Completed  No longer applicable |  |
| Part-time faculty members will be featured in *Mathnet* on a more regular basis. | In progress  Completed  No longer applicable |  |
| In order to enhance communication among its members and especially between first-year and experienced instructors, the department will try to locate all of its faculty offices on the 3rd floor of Building 1. Currently offices are maintained in Buildings 1, 9, 10, and 16. | In progress  Completed  No longer applicable | The department has no control over this. |
| We hope to increase faculty participation in local, regional and national mathematics conferences. | In progress  Completed  No longer applicable |  |

Below are the Recommendations for Action made by the review team. Describe the progress or changes made toward meeting each recommendation over the last year.

|  |  |  |
| --- | --- | --- |
| **RECOMMENDATIONS** | **Status** | **Progress or Rationale for No Longer Applicable** |
| Although the department recognizes its important service role, no consultation with other academic departments was part of the self-study process. Meet with other academic departments and assess how well existing math courses and instruction are meeting the needs of students. Identify opportunities to improve courses/instruction and report on the results of this assessment in the 2007-08 annual update. | In progress  Completed  No longer applicable |  |
| Identify on-going processes for ensuring that math courses and instruction meet the needs of programs and students. Consider an advisory board and/or participation in division leadership teams as possible mechanisms. | In progress  Completed  No longer applicable |  |
| Beginning fall 2007, expand pilots of alternative instructional approaches in MAT 101 and 102 in an effort to improve students’ success rates as measured by persistence and completion of these courses with a grade of C or better. In all pilots, ensure a sample size sufficient to guide decisions about scaling up of new approaches. | In progress  Completed  No longer applicable |  |
| Continue to assess the success of the pilot alternative sequence for MAT 101 and 102 and, based on success rates, determine if this format represents an approach worthy of continuing in the curriculum. Identify through research with RAR the indicators of students who are most likely to benefit from this series. | In progress  Completed  No longer applicable |  |
| Work more closely with the Developmental Studies Department to ensure alignment of course content and an appropriate progression in students’ learning from DEV 108 to MAT 101. | In progress  Completed  No longer applicable |  |
| In collaboration with the Registrar’s Office, continue to identify students who do not meet the prerequisites for MAT courses. As reported during the department review, very good progress is being made in significantly reducing the incidence of students enrolled in MAT classes who do not meet prerequisites (< 22 in spring 2007). | In progress  Completed  No longer applicable |  |
| The Department’s practices to track, analyze and report student performance on common final exams across sections may provide useful information about instructional practices that are worthy of consideration by other faculty. In sections where student achievement is higher than the average over time, identify instructional practices from these sections that then can be shared through departmental in-service programs and other forums. | In progress  Completed  No longer applicable |  |
| Because the department cites the difficulties students’ life circumstances often present to students’ attendance, persistence and success in math courses, the department is encouraged to pair the student success course with more sections of its courses, especially MAT 101. This course can help students develop more realistic goals for college study, learn important strategies such as time management and effective study habits and clarify personal and professional goals, all of which have been demonstrated through research to support higher rates of persistence and academic achievement. | In progress  Completed  No longer applicable | It was found that such pairings attracted very little enrollment. |
| Carry out the planned review of the department’s overall curriculum, and revise the curriculum as warranted to ensure currency, responsiveness to the needs of other disciplines, sound assessment practices and smooth transfer for students wishing to pursue baccalaureate degree study. Eliminate courses that are not required and, as appropriate, courses that have limited enrollment. | In progress  Completed  No longer applicable |  |
| Review the mathematics emphasis area. Identify why student completion of this emphasis area is limited and determine how to increase enrollment. | In progress  Completed  No longer applicable | This was discussed in Section I above. The MAT AS degree needs to align with the first two years of the Math BS degree at Wright State, else we have given students an incentive to transfer without completing two years here. One specific alignment issue is that currently we do not require require a CIS course in the MAT AS degree, but WSU does require a sophomore-level CS course in the their Math BS degree, and they recommend that it be taken in the first two years. The Math Department is working with the CIS Department to identify an appropriate course to add to the MAT AS degree. |
| Develop a plan for expanding understanding and practice of regular assessment at the section, course and program (emphasis area) level. Include in this assessment not only assessment of student learning of mathematics, but also of the college’s general education competencies. | In progress  Completed  No longer applicable |  |
| Identify opportunities to increase collaborations with the sciences and engineering, as well as strategies to help increase the number of students who choose to focus in the study of mathematics. | In progress  Completed  No longer applicable | The Math Department will be working with the Physics Deparment to ensure that offerings of MAT 2280 and PHY 2201 are schduled so that students may conveniently take both classes in the same term. The same will done for MAT 2290 and PHY 2202. The Math Department has been working with the Biology Department to get MAT 1450 added to the program requirements for the Biology AS degree. This will benefit Biology majors. MAT 1450 is mapped to TMM010. There are required courses in the Biology BS programs at WSU and UC that are also mapped to TMM010. Assuming that this program change is approved, MAT 1450 will likely have Biology majors as a majority or at least a plurality of its students. Thus, the Math Department will seek to create some lab activities for this course that are relevant to Biology majors. We will reach out to the Biology Department for help or at least guidance in constructing these activities. |
| In collaboration with Distance Learning and Instructional Support, develop and offer mathematics courses online to meet student demand. | In progress  Completed  No longer applicable |  |

**Section III: Assessment of General Education & Degree Program Outcomes**

The Program Outcomes for the degrees are listed below. **All program outcomes must be assessed at least once during the 5 year Program Review cycle, and assessment of program outcomes must occur each year**.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **General Education Outcomes** | To which degree(s) is this program outcome related? | Year assessed or to be assessed. | Assessment Methods  Used | What were the assessment results?  (Please provide brief summary data) |
| Oral Communication | | All programs | **2011-2012** | none | We are in the process of designing an assessment that will be delivered in all sections of MAT 2320 starting in spring 2013. MAT 2320 is usually one of the last courses that a Math major would take at Sinclair. It is the only math course in our program in which written arguments (mathematical proofs) are as important as performing calculations. Oral communication will be assessed at the end of course by having students present and defend a proof in front of the class. A rubric for assessing these presentations is currently in development. |
| Written Communication | | All programs | **2011-2012** | Departmentally developed Written Communication Assessment Tool, given in sections of Calculus I at the beginning of the term and again at the end of the term. | The Math Department piloted this assessment in Winter 2012, refined it, then piloted it again Spring 2012. A few more refinements were made before Fall 2012. The number of students participating in winter and spring was relatively small, but sufficient to help us test and improve the instrument. One of the things assessed is whether or not students complete their work on an application-based math problem by summarizing their findings in a complete sentence that "makes sense". In Winter 2012, we found that only 7 out 21 students did this properly at the beginning of the term, whereas 14 out 18 did it properly at the end of the term. The spring term yielded similar results.  We also attempted to measure a somewhat more sophisticated type of written communication in the spring--the ability to explain an alebraic property. Unfortunately, due to what has been interpretted as a design flaw in the instrument, students actually seemed to regress in this ability from the beginning of the term to the end of the term. We will attempt to measure this better in 2012/13. |
| Critical Thinking/Problem Solving | | All programs | **2012-2013** |  |  |
| Values/Citizenship/Community | | All programs | **2013-2014** |  |  |
| Computer Literacy | | All programs | **2014-2015** |  |  |
| Information Literacy | | All programs | **2015-2016** |  |  |
|  | |  |  |  |  |
| **Program Outcomes** | | To which course(s) is this program outcome related? | Year assessed or to be assessed. | Assessment Methods  Used | What were the assessment results?  (Please provide brief summary data) |
| Demonstrate ability to think logically and solve problems using analysis, synthesis and evaluation. | | MAT 2270, MAT 2280,  MAT 2290, MAT 2310, MAT 2320, SCI OTM | 2011-2012 | The Calculus I Written Communication Assessment tool referenced above. | Students were asked to solve an application-based math problem at the beginning of the term, and again at the end of the term (as a part of a a larger assessment tool). We tracked six skill areas in their solution technique and three qualities in the way they presented their answer. In all nine things tracked, we saw substantial improvement. It should be noted that the problem used required no calculus, and all students had sufficient mathematical background to work it correctly at the beginning of the term. One of the desired outcomes of Calculus I, apart from developing new mathematical skills, is to hone problem solving skills the students began developing in previous courses. Out data suggests that we are succeeding in this. For example, in spring 2012 we saw the percentage of students who created a mathematical function to help them solve the problem double from 46% at the beginning of the term to 92% at the end of the term. Functions are the cornerstone of modern mathematics, and they are also the key to bridging mathematics to applications in the sciences and other areas. They are so important that students begin learning about them long before calculus. However, the techniques of calculus should, in theory, make the power and importance of functions much clearer to students. Certainly a good goal for Calculus I (and the rest of the sequence as well) is to make students more comfortable and adept at using functions to solve problems. Our assessment would seem to suggest that we are succeeding in this goal. (But, of course, our sample size is still quite small. We will continue to collect more data.) |
| Recognize and articulate an understanding of the increasing interdependence of world cultures and their consequences. | | Soc/Behavioral Science Elective, Arts & Humanities Elective, Multicultural Elective | This section omitted per conversation with Jared Cutler. |  |  |
| Achieve group goals in a variety of social contexts. | | SCC 1101 | This section omitted per conversation with Jared Cutler. |  |  |
| Demonstrate responsibility and accountability in accomplishing goals. | | SCC 1101 | This section omitted per conversation with Jared Cutler. |  |  |
| Communicate effectively in a variety of ways with varied audiences through writing skills, oral communication skills, listening skills, reading skills, computer literacy and information literacy. | | ENG 1101, ENG 1201, COM, MET 1131 | This section omitted per conversation with Jared Cutler. |  |  |

**General Education Outcomes**

1. Are changes planned as a result of the assessment of general education outcomes? If so, what are those changes?

Not yet. We need to develop an assessment of oral communication first, and refine our assessment of written communication.

1. How will you determine whether those changes had an impact?

**Program Outcomes**

1. Are changes planned as a result of the assessment of program outcomes? If so, what are those changes?

No

1. How will you determine whether those changes had an impact?

**Improvement Efforts**

1. What were the results of changes that were planned in the last Annual Update? Are further changes needed based on these results?

The key changes planned in the last annual update were the introduction of the departmentally designed common structures in all sections Beginning and Intermediate Algebra. As discussed before, this seems to have been very beneficial to students.

1. Are there any other improvement efforts that have not been discussed in this Annual Update submission?

As part of the Quantway Initiative, the Math Department began offering MAT 114--Mathematical Reasoning in winter 2012. We offered three sections in winter and then five sections in the spring. The success rates were 68.6% and 70.0%, respectively. The purpose of this class is to offer an alternate path from DEV 108 to MAT 108. MAT 108 (now MAT 1440) is the transfer-module math class needed to satisfy the math requirement for many AA degrees. The traditional path from DEV 108 to MAT 108 has been to take MAT 101 and MAT 102 (Beginning and Intermediate Algebra). There are two problems with this pathway. The first problem is that the material in MAT 101 and MAT 102 is not largely related to the material in MAT 108. The second problem is that MAT 101 and MAT 102 have much lower success rates than MAT 108 and seem like unnecessarily hard prerequisites for this course. The Math Department has been aware of this problem for many years. However, the requiremnt that OTM math courses have a prerequiste of at least Intermediate Algebra seemed beyond our power to influence, at least until recently. The backers of the Quantway Initiative were able secure for us a special variance from the OTM Math Panel for this pilot.

We now have a pathway from DEV 108 to MAT 108 (or from DEV 0026 to MAT 1440 on semesters) that involves one course instead of two. The course is more appropriately designed to meet the needs of non-STEM majors than MAT 101 and MAT 102. Also, consider the following. The success rate of MAT 101 in winter 2012 was 47.4%. The success rate of MAT 102 in spring 2012 was 46.8%. This suggests that of the students who completed DEV 108 in fall 2011, only 22.2% completed both MAT 101 and MAT 102 in the following quarters and were ready to take MAT 108 by the end of the academic year. I got 22.2% by taking 46.8% of 47.4%. In truth, 22.2% is problably higher than the true value, as these success rates include students who tested into MAT 101 or MAT 102 (such students generally have higher success rates than those who tested into a DEV math class).

In contrast, students who completed DEV 108 in fall 2011 and then took MAT 114 during winter or spring were more than three times as likely to be ready to take MAT 108 by the end of the academic year. Furthermore, those who successfully completed MAT 114 in the winter then had an opportunity to actually complete MAT 108 by the end of the academic year.

There seems to be no doubt that this new pathway will help many more students pursuing AA degrees to complete their math requirements in less time and with less stress. For many students, this may be a key factor in determining whether they complete their degree at all. The Math Department will do everything it can to ensure that this pathway becomes approved for permanent use.

**APPENDIX – PROGRAM COMPLETION AND SUCCESS RATE DATA**

**Degree and Certificate Completion**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Department | Department Name | Program | FY 07-08 | FY 08-09 | FY 09-10 | FY 10-11 |
| 0351 | Mathematics | MATE.AS | 7 | 4 | 5 | 4 |

**Course Success Rates**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Department | Department Name | Course | FY 07-08 | FY 08-09 | FY 09-10 | FY 10-11 | FY 11-12 (excludes Spring) |
| 351 | Mathematics | MAT-101 | 48.7% | 45.6% | 46.6% | 47.0% | 49.7% |
| 351 | Mathematics | MAT-102 | 48.2% | 49.0% | 47.0% | 50.2% | 51.8% |
| 351 | Mathematics | MAT-105 | 55.0% | 55.0% | 53.2% | 50.1% | 53.5% |
| 351 | Mathematics | MAT-106 | 72.9% | 73.6% | 69.1% | 70.7% | 70.1% |
| 351 | Mathematics | MAT-108 | 71.8% | 68.9% | 73.6% | 76.4% | 78.0% |
| 351 | Mathematics | MAT-109 | 94.5% | 88.7% | 92.0% | 88.1% | 83.7% |
| 351 | Mathematics | MAT-114 | . | . | . | . | 68.6% |
| 351 | Mathematics | MAT-116 | 59.0% | 59.5% | 56.5% | 57.8% | 58.8% |
| 351 | Mathematics | MAT-117 | 58.1% | 70.0% | 69.4% | 62.3% | 56.3% |
| 351 | Mathematics | MAT-121 | 54.8% | 55.9% | 56.4% | 54.3% | 61.9% |
| 351 | Mathematics | MAT-122 | 72.9% | 73.0% | 74.3% | 69.4% | 72.2% |
| 351 | Mathematics | MAT-131 | 59.6% | 73.1% | 57.7% | 70.0% | 65.1% |
| 351 | Mathematics | MAT-132 | 54.1% | 58.0% | 63.4% | 61.9% | 79.5% |
| 351 | Mathematics | MAT-133 | 65.4% | 53.7% | 61.8% | 70.1% | 53.1% |
| 351 | Mathematics | MAT-141 | 94.0% | 94.1% | 81.6% | 76.1% | 81.8% |
| 351 | Mathematics | MAT-142 | 72.0% | 84.1% | 93.8% | 100.0% | 81.3% |
| 351 | Mathematics | MAT-143 | 100.0% | 87.0% | 56.7% | 91.2% | 81.8% |
| 351 | Mathematics | MAT-191 | 53.7% | 61.1% | 53.0% | 50.2% | 49.9% |
| 351 | Mathematics | MAT-192 | 58.6% | 46.4% | 57.0% | 53.8% | 49.0% |
| 351 | Mathematics | MAT-193 | 60.6% | 57.0% | 58.3% | 54.7% | 55.3% |
| 351 | Mathematics | MAT-201 | 54.3% | 53.7% | 57.3% | 62.5% | 61.9% |
| 351 | Mathematics | MAT-202 | 64.3% | 57.0% | 58.9% | 64.3% | 64.7% |
| 351 | Mathematics | MAT-203 | 67.2% | 54.6% | 76.6% | 68.9% | 75.7% |
| 351 | Mathematics | MAT-204 | 73.0% | 72.4% | 73.5% | 75.9% | 77.0% |
| 351 | Mathematics | MAT-215 | 69.8% | 78.6% | 61.4% | 73.1% | 81.0% |
| 351 | Mathematics | MAT-216 | 81.5% | 72.6% | 72.7% | 67.8% | 79.5% |
| 351 | Mathematics | MAT-218 | 58.5% | 71.4% | 59.2% | 59.5% | 67.3% |
| 351 | Mathematics | MAT-220 | 77.2% | 73.8% | 73.9% | 73.3% | 77.1% |
| 351 | Mathematics | MAT-297 | 33.3% | 40.0% | 100.0% | . | 75.0% |