*Document that provided data about number of majors in STEM.*

 http://nces.ed.gov/pubs2014/2014001rev.pdf

*Data from Fall 2010 – Spring 2016*

|  |  |  |  |
| --- | --- | --- | --- |
|  | PHY131 | PHY241 | MAT241 |
| Total # Students to take course  | 183 | 21 | 246 |
| Total # Non LC students | 110 | 8 | 179 |
| Total # NON LC students to pass | 105 | 8 | 146 |
| Percent to pass: | 95.40% | 100% | 81.50% |
|  |  |  |  |
| Total # LC students to take | 73 | 13 | 65 |
| Total # LC students to pass | 70 | 13 | 62 |

Info regarding data:

* Did not count students who repeated courses – only counted whether they passed 1st time or not – also, 4 students chose to retake the LC, these students were only counted once
* Did not include students who dropped the course in the 1st week of the semester
* A total of 156 students have gone through the LC since fall 2010 with 100 passing the LC. Of the 56 students who failed one or both classes in the LC, several took the “traditional” path and were very successful in the follow up courses.

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Learning Community (LC) faculty have been saying for 6 years that the main focus on the LC is to help students in future STEM courses.  Majoring in a STEM field is difficult; math is a barrier for most students.  Approximately 20% of community college students start as a STEM major with 69% of them changing it to non-STEM.  The LC course is designed to help students be successful STEM students and truly understand how math and physics are intertwined.  So, student grades were analyzed from fall 2010 - spring 2016.  Students that went through the LC vs. those that did not did very well in university physics II and III (95% and 100% passing rates for both groups, respectively).  For calculus III, 81.5% non LC students passed the course the first time while 95.3% of the LC students passed.  A chi-square test of independence was used to test the relation between completing the LC and passing MAT241 at EMCC. We found that there is a significant relationship X^2 (1, N=215) = 7.42, p<.01. Those students who completed the LC were significantly more likely to pass MAT241 than students who did not take the LC. See attached for more detail.