| Akashi College | Year | 2023 | Course <br> Title | Mathematics III B－1 |
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## Course Information

| Course Code | 5306 | Course Category | General／Compulsory |
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| Class Format | Lecture | Credits | School Credit： 1 |
| Department | Mechanical Engineering | Student Grade | 3rd |
| Term | First Semester | Classes per Week | 2 |
| Textbook and／or <br> Teaching Materials | 新線形代数 I 高遠節夫ほか5名共著（大日本図書） |  |  |
| Instructor | NAGAO Hidehito |  |  |
| 年 |  |  |  |

## Course Objectives

（1）Understand the definition and basic properties of linear transformation by matrix and learn its computational techniques．
（2）Understand the definition of matrix eigenvalues and eigenvectors，and learn computational techniques for diagonal matrices．

## Rubric

|  | Ideal Level | Standard Level | Unacceptable Level |
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| Achievement 1 | Learn and can use basic <br> computing techniques for <br> matrices． | Understand the basic computing <br> techniques for matrices． | Do not understand the basic <br> computing techniques for <br> matrices． |
| Achievement 2 | Learn and can use some <br> advanced computational <br> techniques for matrices and <br> vectors． | Understand some advanced <br> computational techniques for <br> matrices and vectors． | Do not understand the more <br> advanced computing techniques <br> for column vectors． |


| Assigned Department Objectives |  |
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| Teaching Method |  |
| Outline | Students will learn the application of matrices as the basis of linear algebra． |
| Style | Classes will be conducted through lectures and exercises，scheduled assignments and quizzes，etc． |
| Notice | The following items are essential for taking this course．New Linear Algebra I（textbook above）Ch．2： <br> Matrices，Ch．3：Matrices <br> Students who miss 1／3 or more of classes will not be eligible for a passing grade． |

## Characteristics of Class／Division in Learning



