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|  | | **UNIVERSITAS PATTIMURA PROGRAM PASCASARJANA**  **PROGRAM MAGISTER PENDIDIKAN MATEMATIKA** | | |
| **SILABUS** | | | | |
|  | | | Nama Mata  Kuliah | **GEOMETRI FRAKTAL** |
| **MATA KULIAH** | | | Kode | PMA-203 |
|  | **(MK)** |  | SKS | 3 SKS |
|  |  |  | Semester | 2 |
| **DESKRIPSI MATA KULIAH** | | | | |
| Mata kuliah ini membahas berbagai konsep geometri fraktal, konstruksi fractal dengan iterasi, geometri dari ukuran, ruang fractal, dimensi fraktal dan interpolasi fraktal. | | | | |
| **CAPAIAN PEMBELAJARAN MATA KULIAH (CPMK)** | | | | |
| 1. | Mahasiswa Mampu mengkaji berbagai konsep geometri fractal dan memecahkan berbagai masalah yang relevan. | | | |
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| **SUB CAPAIAN PEMBELAJARAN MATA KULIAH (SUB-CPMK)** | | | | |
| 1. | Mendesripkan konsep dasar geometri fraktal | | | |
| 2. | Menganalisis konstruksi fractal dengan iterasi | | | |
| 3. | Menganalisis geometri dari ukuran | | | |
| 4. | Menganalisis ruang fraktal | | | |
| 5. | Menganalisis dimensi fraktal | | | |
| 6. | Menganalisis teorema proyeksi | | | |

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| **MATERI PEMBELAJARAN** | | | |
| 1. | Konsep dasar geometri fractal | | |
| 2. | Konstruksi fractal dengan iterasi | | |
| 3. | Geometri dari ukuran | | |
| 4. | Ruang Fraktal | | |
| 5. | Dimensi Fraktal | | |
| 6 | Teorema Proyeksi | | |
| 7. | Teorema Interseksi | | |
| 8 | Interpolasi Fraktal | | |
|  | | **PUSTAKA UTAMA** | |
|  | | 1. | Kenneth Falconer. 2014. Fractal Geometry. Mathematical fundations and applications Edition 2. Jhon Wiley. University of Andrews. UK. |
|  | | 2. | |  | | --- | | Widodo. 2021. Geometri Fraktal. Yogyakarta: UGM Press | |
| **DAFTAR** | | 3. | Martin Churchill, 2004. Introduction to Fractal Geometry. |
| **PUSTAKA** | | **PUSTAKA PENDUKUNG** | |
|  | | 1. | Tommy L¨ofstedt. 2008. Fractal Geometry, Graph and Tree Constructions. Ume˚a University Department of Mathematics and Mathematical Statistics SE-901 87 UME˚A SWEDE. |
| **MATA KULIAH PRASYARAT: -** | | | |
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