**MATH 352 Syllabus and Exercises**

**Numerical Analysis, 9th Edition, Burden and Faires**

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| **Chapter 1** | **Section 1.2**  **(Starting from Page 20)** | Exercises: 1,2,3,5,10 |
| **Section 1.3**  **(Example 1 is not included)** | Exercises: 6,7,13 |
| **Chapter 2** | **Section 2.1**  **(Proof of Theorem 2.1 is included)** | Exercises: 1,3,4,5,10,11,12,16 |
| **Section 2.2** | Exercises: 1—5,10,11,13 |
| **Section 2.3** | Exercises: 1—6,10,14 |
| **Section 2.4** | Exercises: 1,2,4, 6, 10 |
| **Chapter 3** | **Section 3.1** | Exercises: 1,5,10,13 |
| **Section 3.3**  **(From the beginning until Page 129)** | Exercises: 1,3,9 (a),10,17 |
| **Chapter 4** | **Section 4.1**  **(Derivation of equation (4.5) is included)**  **(Round-off Error Instability is not included)** | Exercises: 1,5,7,9,13,20 |
| **Section 4.3** | Exercises: 1,3,5,13,14,17,19,21 |
| **Section 4.4** | Exercises: 1,5,8,9,11 |
| **Chapter 6** | **Section 6.1** | Exercises: 1,5,9 |
| **Section 6.2** | Exercises: 1,5,7,9,11(a,c) |
| **Section 6.3** | Exercises: 5,8,9,10 |
| **Section 6.4** | Exercises: 1,5,7 |
| **Section 6.5** | Exercises: 1,3,5 |
| **Section 6.6** | Exercises: 1,3,5,11,16,18,20,23 |
| **Chapter 7** | **Section 7.1**  **(Proof of Theorem 7.7 is included)** | Exercises: 1—5 |
| **Section 7.2** | Exercises: 1,5,7,9,11 |
| **Section 7.3**  **(Theorem 7.22 is not included)** | Exercises: 1,3,5,7,10,13,14 |
| **Section 7.5** | Exercises: 1,2,3,7 |