## **Information Security**

### 2 units (selection) Kenji Matsuura · Associate Professor / Intelligent Systems, Department of Information Science and Intelligent Systems

- **Target**> This lecture aims at presenting knowledge about Information Security Management System.
- **Outline**> Through this lecture, students have to learn methodology about information security from various viewpoints such as planning, implementing, checking, and management. They also study concrete technologies on these topics.
- Keyword > information security, Confidentiality, Integrity, Availability
- Fundamental Lecture 'Introduction to Computer''(1.0)
- **Relational Lecture 'Operating System**''(0.5), **''System Administration**''(0.5)
- **Goal**> Skills development and knowledge acquisition on information security management system.

### $\textbf{Schedule}\rangle$

- 1. Introduction to Information Security Management System
- 2. Diversification of Network Threats
- 3. Security Policy
- 4. Access Control
- 5. Encryption Method
- 6. Common Key Cryptosystem
- 7. Public Key Cryptosystem
- **8.** Authentication and Authorization
- 9. Public Key Infrastructure
- **10.** Malware and Security System
- **11.** Network Security Management
- 12. Firewall and Filtering
- 13. Intrusion Detection System and Intrusion Prevention System
- 14. Secure Development
- 15. Summary of the lecture
- 16. Examination

# **Evaluation Criteria** Comprehensive evaluation due to the result of examination and reports.

- Textbook〉特に指定なし、適宜資料配付.
- **Reference**〉授業内容が多岐に渡るため、これらのトピックに合うものを適宜購入されたい
- Contents http://cms.db.tokushima-u.ac.jp/cgi-bin/toURL?EID=215983

Student〉 開講コース学生のみ受講可

### **Contact**>

 $\Rightarrow$  Wednesday 10:00-11:00

#### $Note \rangle$

- ◊ 2 hours of both preparation and review are required for 2 hours lecture.
- $\diamond$  Achievement and evaluation on lecture 1–14 will be carried out with reports and examination.