

## 2010 Autumn semester Pattern Information Processing

### Course guide

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#### Instructor

**Akira Asano** (right)  
Professor, Information Engineering



#### Office

C703, Faculty of Integrated Arts and Sciences

#### Office hours

5. and 6. periods on Wednesdays

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#### Subject

Digital image processing has been recently getting familiar to us in our daily life. This course will focus on four topics of digital image processing techniques with the mathematical background required for understanding these techniques.

#### Grading

At the end of each topic, a report will be requested. Students are required to read a paper concerning the topic, summarize it with your comment, and submit the report with a copy of the paper at the beginning of the next session. Students must write their reports *in English*. No examination is assigned.

#### References

M. Petrou and C. Petrou, *Image Processing The Fundamentals*, Wiley, ISBN978-0470745861

A. K. Jain, *Fundamentals of Digital Image Processing*, Prentice Hall, ISBN978-0133361650

浅野晃・浅野(村木)千恵・木森義隆・棟安実治・延原肇・藤尾光彦, 非線形画像・信号処理 モルフォロジーの基礎と応用, 丸善, ISBN978-4-621-08294-2

伊東一良(編), 浅野晃・津村徳道・野村孝徳・廣川勝久・的場修, 原理がわかる・現場で使える 信号処理, 丸善, ISBN978-4-621-08210-2

#### Handouts

No textbook is used. The handout for each session is uploaded on the web site shown below until its previous session (one week before the corresponding session) for your convenience of preparation. Please print and bring it to the class every week.

#### Web site and email address

<http://laskin.mis.hiroshima-u.ac.jp/Kougi/10a/PIP/>  
[asano@hiroshima-u.ac.jp](mailto:asano@hiroshima-u.ac.jp)