Report by Grad Curr Cmt - June 27, 2017

A. Recent processing

- A. Learning Module for <u>Intro Programming Python</u> was drafted and presented to SoCS Council on Apr. 4, 2017.
- B. Faculty comments were received.
- C. Grad Curr Cmt revised draft subsequently.
- D. The <u>revised module</u> was distributed to Faculty on June 6.
- E. Report to Faculty was scheduled at June 13, but ...

B. Tasks

- a) Explain how faculty comments were addressed.
- b) Request approval of the module.

1

Summary of Faculty Comments

- 1. On Python 2 versus Python 3
- 2. On the Scope of Learning Objectives
- 3. On Array and List
- 4. On Type of User Input
- 5. On Python Libraries
- 6. On Coverage of Textbook Chapters
- 7. On the Structure of Learning Module

On Python 2 versus Python 3

Faculty comment

"The resources are a mix of python 2 and python 3 (there are a number of significant differences between the two and many python users are sticking with python 2, so the most recent may not be the best choice), you should settle on one particular version."

Decision

- 1) The co-advisers decide whether the student needs to learn only Python 2, or only Python 3, or both. The decision is stipulated in <u>Additional Objectives</u>.
- 2) The individualized module is kept in the student's file.
- 3) At QE time, written exam will be prepared based on the stipulation.

3

On the Scope of Learning Objectives

- Faculty comment
 - ☐ "From the learning objectives, the whole thing sounds like a very light coverage of python."
- Explanation
 - ☐ The intention is to cover the minimal scope, and to allow addition by Adv Cmt as needed for flexibility (see *Additional Objectives*).

On Array and List

- Faculty comment
 - ☐ "Core learning objective 7 is confusing: Python does not have arrays; there are lists, but they are not exactly traditional linked lists, although linked lists can also be implemented via objects."
- Revision
 - 1) The <u>objective 7</u> is revised.
 - 2) Phrase "linked-lists, arrays" is replaced by "lists".

5

On Type of User Input

- Faculty comment
 - ☐ "Learning objective 8 is too vague. Are we talking simple text files, csv files, binary files, pickeled objects?"
- Revision
 - 1) The <u>objective 8</u> is revised.
 - 2) The user input is specified as text files.

On Python Libraries

- Faculty comment
 - "I think some references to python libraries should be covered."
- Revision
 - 1) The objective 9 is added.
 - 2) It covers how external packages are integrated into a program. Chapter 12 is added as the result.
 - 3) Libraries on specific areas are left to the Adv Cmt to specify, if needed.

7

On Coverage of Textbook Chapters

- Faculty comment
 - □ "Why not Chapters 1-11, i.e., Part I?."
 - The original scope was "Chapters 1-10 inclusive."
- Revision
 - 1) Chapter 11 on unit testing is included, which extends the scope to "Chapters 1-11 inclusive".
 - 2) Chapter 12 starts the first project (among 3 in the book), which spans Chapters 12-14. Hence, Chapters 13 and 14 are <u>recommended</u> for completeness, if so preferred.

On the Structure of Learning Module

- Three options were proposed
 - □ Option 1: Learning Objectives + Learning Resource
 - □ Option 2: Option 1 + Objective mapping (elaborative)
 - □ Option 3: Option 1 + Objective mapping (concise)
- Faculty feedback
 - A. Options 1 and 2 each got one explicit vote.
 - B. No one indicated preference on Option 3.
- Decision
 - ☐ Option 2 (including Option 1) is adopted.

9

Motion for Approval

- Motion
 - ☐ Approve the format and basic contents of learning module on Intro Programming Python (2 pages) allowing for regular updates as needed, with appendices included for providing additional details on recommended learning resources.