

SGG 3643

Computer Programming III

Course Introduction



Introduction

- The aim of study is to provide basic knowledge in Internet programming and to highlight the importance of the subject for web-based GIS development.
- Students will be exposed to basic knowledge in web programming languages such as HTML, CSS, PHP, XML, XSLT and KML.



Weekly Schedule

Week 1 : Introduction to the course

Week 2 : Introduction to HTML

Week 3 : HTML & CSS

Week 4 : HTML & CSS

Week 5 : Mid-semester break / Chinese New Year

Week 6 : HTML, PHP & GIS

Week 7 : HTML, PHP & GIS

Week 8 : Introduction to XML & XSLT

Week 9 : XML & XSLT

Week 10 : XML based applications

Week 11 : XML based applications

Week 12 : Introduction to KML

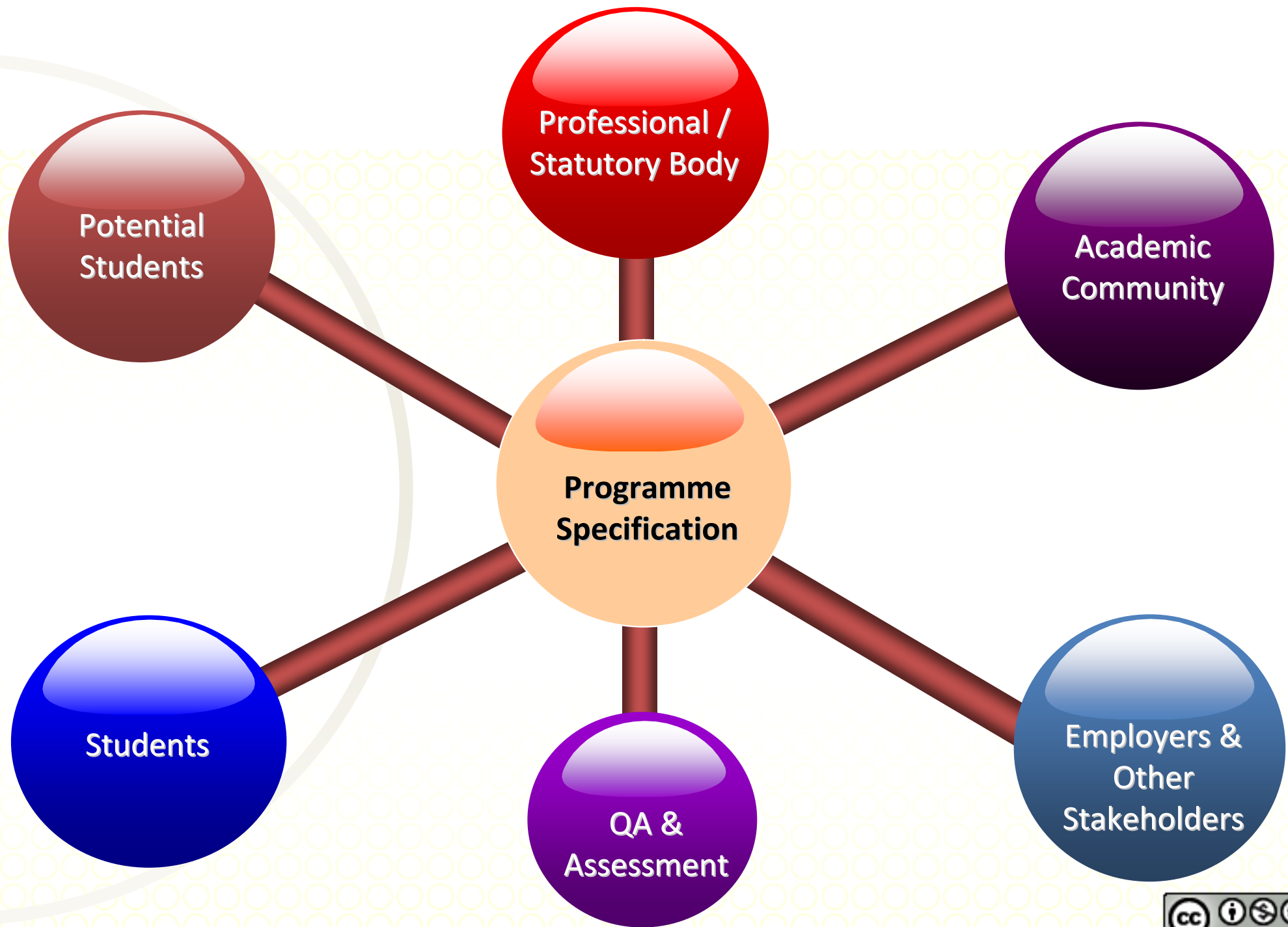
Week 13 : KML & GIS

Week 14 : KML & GIS

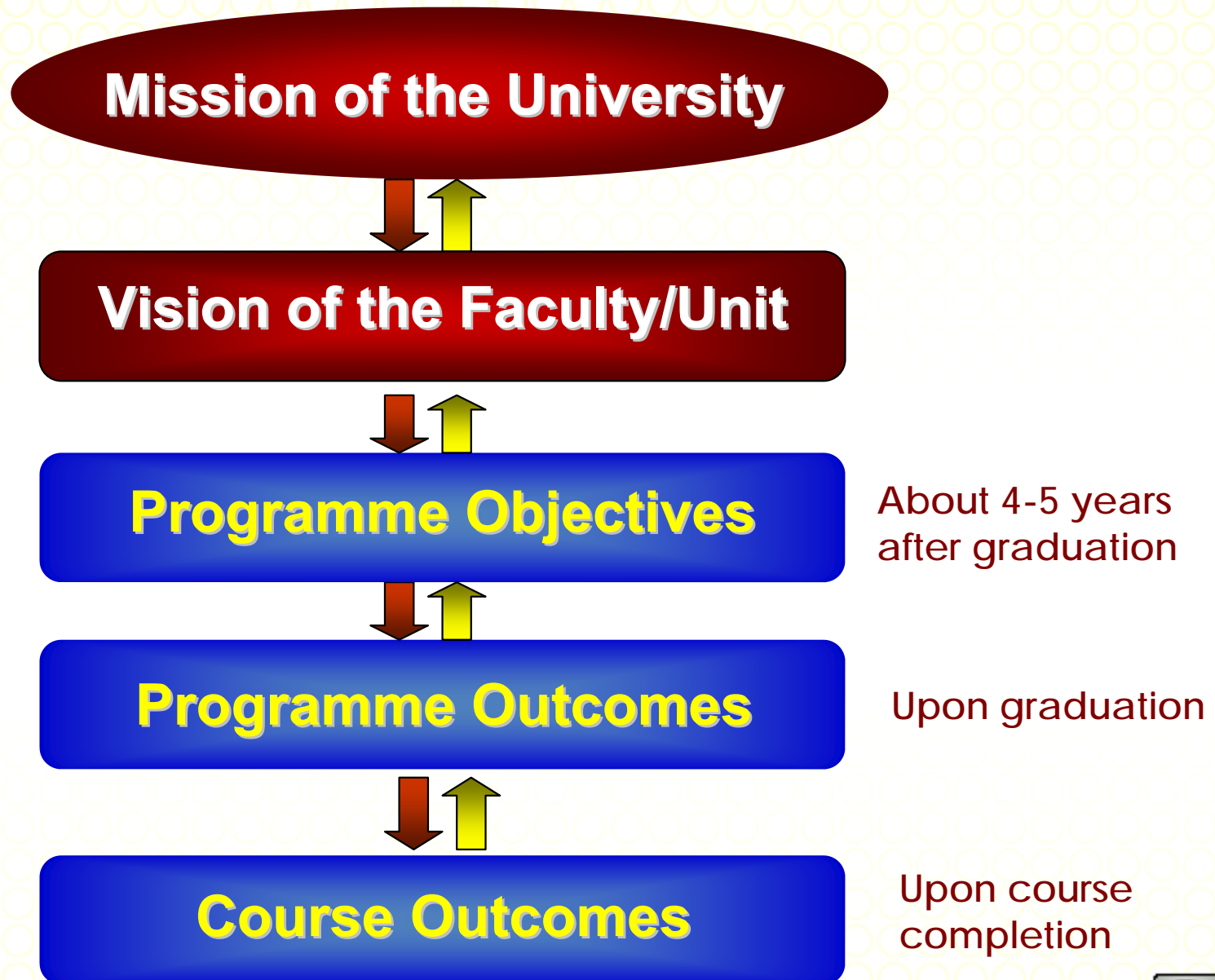
Week 15 : Revision week

Assessment

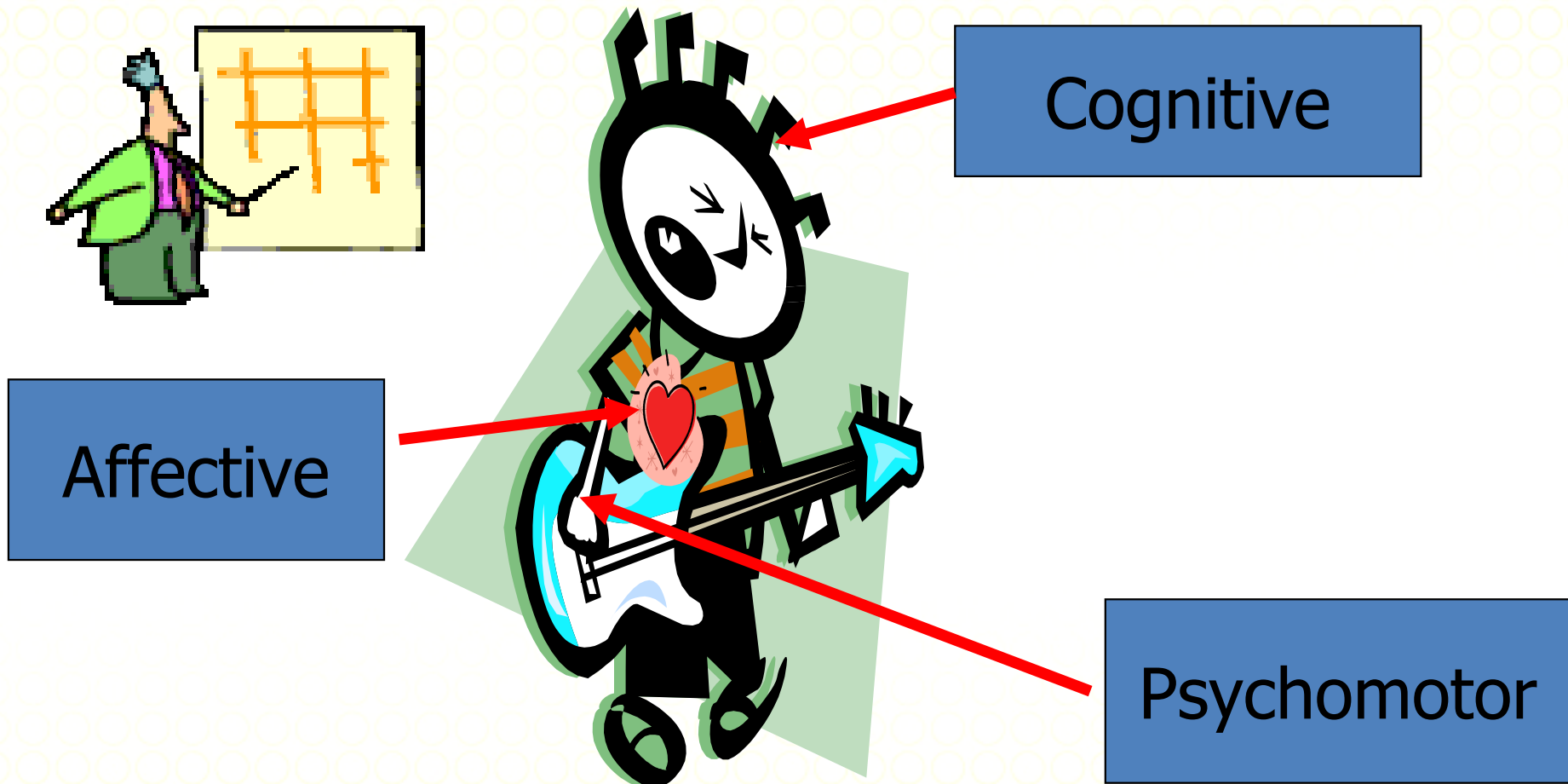
Assessment	#	% Each	% Total
Assignment	1 (week 2)	10	10
Lab Tasks	4 (week 2, 6, 9, 12)	5	20
Tests	2 (week 6, 12)	10	20
Peer Assessment / Observation (Generic Skill)	During labs	-	10
Final Exam	1 (exam week)	40	40
Overall Total			100



OBE Model Hierarchy



The 3 Domains of Educational Goals



Programme Outcome (PO)

- | | |
|-----|---|
| PO1 | Able to acquire knowledge of science, technology and innovation in the field of GIS, remote sensing and geospatial related technologies. |
| PO2 | Able to apply knowledge, methods, techniques and skills on GIS, remote sensing and geo-spatial related technologies in solving various geospatial problems. |
| PO3 | Able to identify, formulate, manage, analyze and solve problems related to geoinformation technologies development and applications. |
| PO5 | Able to think critically, logically and analytically in solving geospatial-related problems. |
| PO6 | Able to work individually and collaboratively as part of a team. |

Course Outcome (CO)

CO	Course Outcome (CO)	PO	Bloom Taxonomy
1	Ability to <u>define</u> and <u>explain</u> the concepts of web development and its applications.	PO1	COGNITIVE
2	Ability to <u>discuss</u> open issues concerning web applications and trend.	PO2	COGNITIVE
3	Ability to <u>carry out</u> static web application development using HTML and CSS coding.	PO3	COGNITIVE
4	Ability to <u>analyze</u> the design of HTML / XML based files and <u>solve</u> implementation issues.	PO3	COGNITIVE
5	Ability to <u>practice</u> HTML and XML knowledge in development of a simple web-based GIS application using practical solution.	PO5	PSYCHOMOTOR
6	Ability to <u>cooperate</u> and <u>commit</u> collaboratively as part of a team and work individually in solving web application problem.	PO6	AFFECTIVE