Timetabling Training
November 2006
Today’s training

• Fall 2007 Timetabling
• Application Preview
• Lab Exercise
Change in the process

- New web-based data submission (worksheets provided for info only)
- Change in the order classes are timetabled
  1. Large Lecture Rooms
  2. Departmental Timetabling
  3. Computer Laboratories
  4. Continuing Education (X courses)
Timetabling process

• Data entry
  – Spring 2007: mandatory for LLR/LAB requests
  – Fall 2007 and forward: also mandatory for departmental timetabling
    • Departments will receive last-like semester data in the form of required times/rooms for each class offered

• Timetabling (solving)
  – Fall 2007 and forward: mandatory for all
    • Volunteering deputies will use the full functionality of the solver
    • Others may elect to use the solver in a mode that only checks the consistency of data (finds any problems)
Data entry – Rooms

• Each department has a list of rooms divided into categories:
  1. Classrooms
  2. Additional instructional rooms
  3. Special use rooms
  4. Non-university locations

• It is necessary that you check the list to see if
  - All rooms to be used are included
  - The capacities of your rooms are correct

Note: The classrooms you see in the application are those assigned to you for Fall 2007
Data entry – Rooms

• Room sharing
  - It is possible to share rooms between departments
  - It is necessary to share rooms if the classrooms are assigned by SMAS to two or more departments or a college – allocation of times in rooms is then up to assignees
Data entry – Instructors

• Purpose of instructor list:
  Allows departments to develop a non-conflicting schedule for instructor

• The list of instructors is yours to manage
  - You can add/remove any instructor
  - Your data about the instructor doesn’t have to match the payroll (e.g., can have new instructors)
  - You should search for a person’s PUID when you are adding him/her to the list (there is a tool for this in the application) as the instructor is matched with other Purdue systems based on his/her Purdue ID.
Data entry – Instructional offerings

A brief review of terminology

Instructional Offering
  • In most cases an equivalent of a course (e.g., MA 162)

Configuration
  • Organization of instruction
    (e.g., Lec only, Lec-Rec-Lab, …)

Scheduling Subpart
  • A part of the course consisting of one or more classes of the same instructional type
    (e.g., MA 162 Lecture consists of Lec 1, Lec 2, …)

Class
  • A group of students meeting together for instruction
  • A class is the object that is timetabled
    (e.g., MA 162 Lec 1)
Data entry – Instructional offerings

Terminology – Example

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<tr>
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</table>

Legend
1. Instructional Offering
2. Configuration (named by user)
3. Scheduling Subpart
4. Class

Legend
2. Configuration (named by user)
3. Scheduling Subpart
4. Class
Data entry – Instructional offerings

• You can have any courses in your list of instructional offerings – the application does not perform checks against the course catalog

• However, there is a link to the course catalog website (www.courses.purdue.edu) for each course, so you can check the configuration of the course

• If the course configuration does not agree with the course catalog, you will learn about that shortly after submission of your data (Big Brother is watching)
Data entry – Instructional offerings

- Grouping
  - A tool to set up attendance relationships between classes

<table>
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</thead>
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</tbody>
</table>
Data entry – Cross-listed courses

• Both “meets with” and “conjoined” courses are handled as cross-listed in the timetabling application

“Conjoined” courses are truly one offering under two (or more) names
“Meets with” may have only part of the course in common – e.g., lecture is taught together, but recitations and labs are separate – this is still set up as one instructional offering (as cross-listed courses) and the recitations and labs are split by the means of a new class level reservation.
Data entry – Preferences

- Color-coding for preferences – consistent throughout the application

Range for your departmental timetable
- Required
- Strongly Preferred
- Preferred
- Neutral
- Discouraged
- Strongly Discouraged
- Prohibited

Range for the classes you do not timetable
- Strongly Preferred
- Preferred
- Neutral
- Discouraged
- Strongly Discouraged
Data entry – Distribution preferences

- The distribution preferences set relationships between classes
- Examples
  - Back-to-Back
  - Same days
  - Same start time
Data entry – Reservations

- Academic Area (curriculum) reservations
  - Same as on the worksheets

- Course reservations (for cross-listed courses)
  - The course reservations provide a means to set the course limits for each of the cross-listed courses (necessary for the systems to which data is exported from the timetabling application)
  - Can be put on the class level to distinguish which classes are associated with which course e.g., special honors recitation class with honors course
Solver

- Expected usage
  - Check the consistency of input data
    - Do we have all the necessary information?
    - Is it possible to create a timetable? Or do two classes require the same room at the same time?
  - Create a timetable
    - Timetable generated based on input data
    - Users can make incremental changes to this timetable at any time
  - Commit the timetable (= submit to SMAS)
Solver

Advantages

- The timetable you submit does not have any inconsistent input data
- You can see if there are any student conflicts with other committed classes as soon as you have the timetable (before you commit) – you don’t have to wait for the test schedule runs to discover these problems
- For example, your class might overlap with a LLR class that the students need to take too – you will see this information in the application when you create a timetable (even if the LLR class is from another department)
Preview & Lab exercise

- Goals for the remaining two parts of today’s training
  - Refresh your knowledge of data entry
  - Focus on how to create your departmental timetable (this part was not introduced during the LLR/LAB trainings in August)
Contact information

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  – Please, start the subject with the word “Timetabling”