



## Handbook for setting up ESTRO courses

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## **INTRODUCTION**

The European School of Radiotherapy and Oncology is an international school that aims to improve, professionalise and standardise knowledge and practice in radiation oncology and associated professions in Europe and beyond.

To accomplish this mission the ESTRO School promotes a large range of education tools, in particular high-quality teaching courses. The courses are designed to meet the needs of practicing radiation oncologists, radiation oncology residents, radiation biologists, radiation physicists, radiation technologists, oncology nurses and oncology administrators, as well as oncologists working in related specialties

To facilitate the task of the people involved in the set-up and organisation of ESTRO courses, a set of guidelines have been developed and are compiled in this manual.

The manual contains 4 sections designed for

1. Course directors and teaching faculty
2. local organisers
3. course coordinators(ESTRO office)
4. companies

# GUIDELINES FOR COURSE DIRECTORS AND TEACHING FACULTIES

## Defining the Course Aims

The aims of the course should be clearly defined in terms of what the candidate will be able to understand or do when the course is finished.

## Defining the target group

The target population should be defined clearly. Most ESTRO courses are designed to meet the needs of the radiotherapy team including physicists, doctors and RTTs. The more recent multidisciplinary courses, often supported by sister organisations, could attract other oncological professionals as well.

Financial viability is usually ensured if course registration exceeds 80. 50-80 participants gives the optimal opportunity for interactivity, but some courses, such as those about IMRT or introduction of new technologies, may attract much larger numbers.

## Defining the course content

The relationship of the course content to ESTRO's core curriculum must be defined and the course director should consider what knowledge, skills, and competencies are to be acquired. Please consult the core curricula 2002 available on the ESTRO website at [www.estro-education.org](http://www.estro-education.org). A revision will be published in early 2010.

The programme of new courses should be submitted for review and discussion to the chairperson of the ETC.

## Faculty

*Course directors* are appointed by the ETC through its chair. The position of the course director is reviewed after 3-4 years; replacement is discussed after 5-7 years. In case of any major problems the ETC chair will, in cooperation with the course director and the teaching faculty, look for and decide on appropriate solutions.

There should be one course director unless there is an overriding reason for sharing this job.

For new course directors, advice on setting up a new course and choice of teachers can be obtained through the Education and Training Committee of ESTRO.

*Teachers* are appointed by the course director. Selection criteria are:

- expertise in the field (based on publications, references etc)
- pedagogical & communication skills
- enthusiasm for teaching

Consideration should be given to geographical spread and gender balancing.

Faculties usually consist of 6-8 teachers although well-founded exceptions are possible. The ETC advises a phased turnover of teachers, who should preferably be on the course for 5 - 7 years. To ensure the stability of the course, ex-teachers can be reappointed. For new courses it is preferable to keep the same faculty for at least 3 years before starting turnover.

Teachers are expected to attend the course at all times in order to contribute to discussion after lectures and case presentations as well as for personal development and team integration.

It should be made clear to all potential contributors that there is no sponsorship available. Hotel and travel expenses are paid by ESTRO at economy rates.

For multidisciplinary courses, the faculty should be multidisciplinary although the participants are expected to be primarily from radiation oncology. Teachers from other disciplines should be made aware of the special features of ESRO courses, such as lack of sponsorship and attendance requirements. Extra time should be allowed to establish the necessary links.

It is recognized that multidisciplinary courses may require more teachers but economic considerations must always be taken into account. For this reason, more local teachers (from outside the core faculty) could be invited.

In specific cases, as for volume delineation exercises, extra external personnel/staff may be required.

The faculty is entitled to the following per diem allowance (150€/day for course directors, 100€/day for teachers) and travel and accommodation is covered by ESTRO.

For pre-conference courses (1 day) the allowance is of 250€ for course directors, 125 € for teachers and travel and accommodation is only applicable for teachers outside the field of Radiation Oncology. The registration fee for the conference itself is not included in this package.

### **Defining the Course format**

Courses should be as interactive as possible and optimal numbers are defined to facilitate this.

Courses will consist of a mixture of lectures and case presentations and discussion using clinical examples.

### **Course Book**

This should start with a list of contents.

The course book should contain copies of the slides of all lectures that will be given during the presentation. This is particularly useful to those whose first language is not English. Changes can be made but should be kept to a minimum, particularly in places where the participants' knowledge of English is likely to be limited.

The presentation of each lecture should start with a narrative description of the learning objectives of the lecture, followed by a list of essential references recommended for further reading. In addition, an abstract for each lecture is very useful for participants.

Details of case presentations and exercises such as volume delineation are sometimes included within the course book.

Consideration should be given to presentation of the slides in a way that prevents their reproduction without the permission of the author. Course books are also available online for all participants and for all the teachers for 1 year.

### **Preparation of course material**

Templates are now available for preparing slides and case studies and these should be used as they will facilitate the transfer of course material to E-learning programmes. These are available from the ESTRO office or from the website.

Animation of slides during presentations should not interfere with the readability of the words.

For exercises such as contouring, the required data (planning CT-scans as well as diagnostic and clinical information) must be selected and installed before the course by the course director together with the teachers involved, the ESTRO office and the supporting organisation. For volume delineation a maximum of 3 participants should be allocated to each computer, and the appropriate number of computers required calculated, based on the number of participants.

### **Accreditation and certification**

Accreditation from any relevant bodies should always be sought for these courses. All ESTRO courses are accredited by ACOE (Accreditation Council of Oncology in Europe). ACOE accreditation is endorsed by EACCME, the European Accreditation Council for Continuous Medical Education - an institution of the European Union of Medical Specialists (UEMS) and by the American Medical Association (AMA).

Where there is a relevant national scheme, teachers can also count this activity as part of their own continuing professional development (CPD).

A certificate of completion of the course will be given to participants who have attended all sessions. This is awarded following completion of an evaluation form. The teachers will receive a similar certificate.

In the longer term, ESTRO may develop a system for summing and accrediting courses in such a way as to produce a fellowship or diploma.

### **Evaluation tools**

A standard evaluation questionnaire is used for all courses with a rating score of one to five for a number of items.

Course directors should receive copies of all these forms from ESTRO and should analyse whether there any amendments which need to be made to teaching input (for example, if one speaker or one lecture subject has consistently low marks).

All free text comments made by participants should be evaluated and appropriate changes made.

## Course tests

Tests containing approximately 40-50 questions should be made available to all course participants and should be completed on a paper form at the end of the course or on an electronic form via internet within a defined time period following the course. Marks are returned to the participants by the ESTRO office. MCQs online are currently being used in most teaching courses.

## Multiple Choice Questions (guidelines from F Stewart and H Nystrom)

### BASIC RULES:

1. The exams should be easy to correct
2. The questions should be clear and unambiguous.
3. The exams should reflect the content of the course and correspond to the learning objectives as indicated at the beginning of each lecture.
4. The exam should not be too difficult to construct in order to make up-dates possible and new questions easy to introduce.
5. The format should either be true/false answers (preferred) or only one correct from 4/5 possible. If this format is chosen, take extra care with wrong answers; these must be plausible but incorrect, not "Mickey mouse".
6. Suggest a total of 100 questions if T/F, or 40-50 if 1/4.
7. All questions should be circulated to all teachers in advance of exam and checked for ambiguities. Teachers should also ensure that this material is covered in the course.
8. Course director should evaluate % correct answer for each question and give feedback to teachers. Questions with unrealistically high or low correct scores should be modified.

### CONSEQUENCES:

- Point 1 in practice rules out everything but MCQs.
- To fulfil point 2, only one alternative should be correct. With a standard format, that many courses use, this means that for every question there is one correct answer and maybe 3 or 4 false suggestions. For the constructor of the exam, false answers are much more difficult to come up with than correct answers! The false alternatives often becomes "Mickey Mouse" answers, i.e. obviously incorrect suggestions.
- Point 5: At present, 3 of the 12 course exams use only T/F; 5 use only 1 of 3-5; 4 courses use a mixture (sometimes with more than one correct answer).
- Only True/False options? This minimizes the need to suggest false answers. It is obvious that one and only one alternative is correct. It is easy to correct.  
Several possible alternatives with only a single correct answer? Maybe more ambiguous, but for some of the courses, especially where clinical information is given in a case history, it could be valuable.  
Since 50% is expected to be correct just by chance (guessing), there is a need for a larger number of questions compared to traditional MCQs. If a certificate should be given upon passed exam (50% of the answers correct), the number of questions should be increased for the above reason.
- Point 6: A suggestion would be to have around 100 questions if all questions are T/F; if questions are multiple choice, 1 from 4 or 5, then the number could be reduced to 40-50. This should be reasonable both in terms of efforts for the exam constructor, the time for making the exam and to reduce the effects of randomly correct answers.  
At the moment this varies between 12 questions (treatment planning: 1 correct answer from 4 possibilities per question), to 155 questions (BT: true/false).

- Point 7: Although it is the responsibility of the course director to construct the exam, he/she should encourage each member of the faculty to contribute. Each question should “belong” to a specific teacher and be replaced with the teacher, alternatively be approved by the new teacher. Each course should aim at building up a bank of questions so that a course does not give exactly the same exam from year to year. Questions can, however, be recycled.  
Point 8: The results from the exams should be monitored and used as a tool for improving the content of the course. Feed-back should be given to each teacher in order for him/her to improve either the lectures or the questions. Yes, feedback both from other teachers prior to the exam and from participants after the exam (or knowledge on how each question fared in terms of 100% correct answers) is essential to improve the quality of the exams over the years. Presumably any questions scoring less than about 50% correct, if true multiple choice, or 70% correct (T/F), is either an ambiguous question or the material was inadequately covered in the course. Any question that scores 100% correct is probably too easy.

### **Post course work**

The course director should evaluate all the feedback forms and should obtain feedback from other course teachers. S/he should share relevant feedback from participants with other course team members.

It is often most helpful and appropriate to redesign the course or to make any necessary changes at the time of completion of the current year's course, while it is fresh in one's mind and before the pressures of normal daily work resume.

## GUIDELINES FOR LOCAL ORGANISERS

The local organising committee has an important role in facilitating local arrangements and arranging the social programme with appropriate fund raising activities. To recognize this effort, free registrations are offered to the department of the local organiser, 1 per 25 participants. Depending on the subject of the course, members of the local staff might be invited to participate as invited teachers to the programme.

The tasks and responsibilities of local organizers include

Finding a venue for the course

Finding a hotel for the participants and teachers (room rates ranging from 80-130€)

Possibly putting the appropriate ESTRO course coordinator in contact with a travel agency to deal with hotel reservations and/or facilitating social activities

Finding a location for a welcome reception for all the participants (20€/p)

Finding a restaurant for the teachers dinner (60€/p)

Suggesting a place/restaurant for the social dinner (50€/p)

Promoting this event nationally

Finding possible local sponsorship for the event

Getting local accreditation with the help and support of the course coordinator with regards to the requested documentation

The name and organization will be printed on the teaching course brochure and in the course books.

## **GUIDELINES FOR ESTRO COURSE COORDINATORS**

### **Defining date and place for the course:**

To define the date the course coordinator should check the calendar of important oncology events, the national calendar of events, the calendar of (bank) holidays and the availability of the teachers.

To define the place, the coordinator should take into account the rotation of the course over time in Europe, political/society issues and accessibility of the place.

Dates and venues for courses should be fixed at the end of July of the year before the courses take place.

### **Promotion of the course**

The course coordinator is responsible for the preparation of the announcement of the course in a course specific flyer, the annual ESTRO educational booklet and the web site of the School. The course coordinator should therefore contact the course director to obtain the information on course aims, target group and educational content.

The course coordinator should furthermore ensure that the course is included in the monthly ESTRO email flashes at appropriate times and contact the National Society of the country where the course takes place to have the course announced on their web site.

### **Accreditation of the course**

The course coordinator should apply for ACOE accreditation for the course through the ECCO website and compile the appropriate documents for this application.

The course coordinator should include the ACOE accreditation points in the certificates of attendants for the course participants and faculty and prepare them for distribution at the end of the course

### **Choosing the venue for the course**

Consideration should be given to the size of the main lecture theatre to accommodate the whole group and the availability of space for breakout groups - as often needed for interactive case discussions and exercises. Enough space must be allowed to install materials, including computers, for the interactive exercises.

The need for parallel sessions must be considered, particularly for physicists and clinicians. Physicists often request a depth of detail about specific planning and dosimetry problems which is unnecessary for clinicians. However there is also feedback that it is a source of irritation to participants that they are not able to attend all parts of the course and therefore an appropriate balance should be sought here.

Financial constraints might influence the choice of venue for a hotel, university, institute or association but the main constraint is the suitability and flexibility of the venue.

### **Ordering audio visual equipment and AV support:**

The course coordinator should arrange for all AV equipment needed for the course such as beamer(s), a screen, laptop(s), amplifier & microphones, internet connection, an overhead projector, a flip chart.

### **Arranging accommodation for the participants:**

The course coordinator should select a travel agent that will deal with the accommodation or select a number of hotels, negotiate a good deal with them and block a sufficient number of rooms. The coordinator should prepare an accommodation booking form and make it available to the participants of the course on the web site of the School.

The coordinator should prepare travel information for the participants and faculty and make them available on the web site of the School.

### **Arranging the catering and social activities:**

The course coordinator should arrange the coffee breaks and lunches in collaboration with the local organisers or the relevant person in the course venue.

The course coordinator should arrange for the teachers' dinner, the welcome reception and social dinner in collaboration with the local organiser.

### **Liaising with the faculty**

The course coordinator should inform the faculty about the venue and dates of the course and keep them informed about possible changes.

The course coordinator should liaise with the course director to obtain the final programme of the course and make it available on the web site of the School.

The course coordinator should inform the faculty of the deadlines for submitting their presentations for the course book and chase them to obtain all course material in time.

The course coordinator should arrange travel and accommodation for the faculty and inform them about all practicalities. The course coordinator is responsible for the payment of the per diem allowance to the faculty (150€/day for course directors, 100€/day for teachers)

### **Preparing the course book**

The course coordinator should compile and edit the course book and arrange for the printing or uploading onto USB keys.

The course coordinator should also make the course material available online to the participants and the faculty before the course and update these presentations after the course.

The presentations online should be made available in secured, low resolution pdf format.

### **Follow up of registrations**

The course coordinator should regularly check the registrations and payments for the course and take action if registrations are coming too slowly.

The course coordinator is also responsible for replying to all possible questions of course participants and should send a final confirmation letter to all participants at the latest 2 weeks before the start of the course.

### **Homework**

If the participants to the course are required to prepare some homework for the course, the course coordinator should inform them in time about the content, the way it should be prepared and the deadlines.

To that end the coordinator must liaise with the course director to obtain the (updated) homework and the guidelines.

### **Organizing shipment of course material to venue**

The course coordinator should prepare the shipment for the course in time and follow up personally if to ensure that it arrives in time.

### **Management of the budget**

The course coordinator should prepare a budget for the course including costs and income for meeting room rental, AV equipment, honoraria, catering & social activities, accommodation, transportation, promotion, educational material, sponsorship, registration fees.

The course coordinator should check all payments and invoices for the course and allocate them to the budget of the course.

The course coordinator should closely follow up this budget and liaise with the manager of the School or the ESTRO CEO in case of problems.

### **Exhibition and sponsoring**

The course coordinator should provide the ESTRO events coordinator with all information required for the participation of companies in the course or for possible sponsorship.

### **Assisting in the preparation of the evaluation of the course**

The course coordinator should compile the questions for the course test and prepare the evaluation forms for the course. When the results are compiled, the coordinator should inform the faculty about the results of both the test and the evaluation and the participants individually about their results for the test.

# GUIDELINES FOR COMPANIES PARTICIPATING IN ESTRO COURSES

## Course director

- Will send all communications linked to companies to the course coordinator who will then liaise with the ESTRO contact for companies. Communications will then be forwarded to the companies by their ESTRO contact
- If a company is actively participating in the scientific programme, the course director will provide ESTRO with information on the material that has to be prepared by the company 3 months before the starting date of the course.
- The course director is not responsible for the discussions with the companies and should therefore not directly be in contact with them except under special conditions agreed by ESTRO.

## Course coordinator

If there is an **exhibition** during the teaching course, the following must be considered:

- **Venue for companies:**  
The course coordinator will make sure that the venue offers a suitable location for the exhibition, considering the number of companies that could take part in the exhibition. The size of this location will be chosen bearing in mind that this area will hold:
  - the booths of all companies (ideally all in the same area)
  - coffee breaks and lunches for participants, teachers and exhibitorsThe location will have to offer the best conditions for visits to booths if any.
- **Information package for companies:**  
The course coordinator will prepare a package including
  - General information for company delegates
  - Announcement given to the participants
  - Information on the course venue
  - Accommodation form
  - Scientific program
  - If there is a need to communicate heavy files to companies (ex. Cl. Cases), the appropriate ftp link.

The ESTRO contact for companies will send this package to the companies 2 months before the course, including the:

- space application form
- advertising and sponsoring forms
- Companies symposium:
  - they should be held outside the programme schedule, in the morning before the start of the course or at the end of the day
  - the presentation cannot be made by a faculty member
  - the course director should receive an abstract of the presentation before the course and be entitled to suggest changes and give comments
  - the course director can evaluate these satellites on an annual basis

If two or more companies' plenary talks are held at the same time, the schedule must be approved by the ESTRO office as companies have to be informed about the appropriate format and delivery.

If there is **no exhibition** during a teaching course, the following documents will be sent to companies by their ESTRO contact 2 months before the course:

- Announcement of the course
- Scientific program
- Sponsoring form

Whether there is an exhibition or not, the course coordinator is not responsible for the discussions with the companies and should therefore not directly be in contact with them.

#### **Local organiser**

- Venue for companies:  
The local organiser will make sure that the venue offers a suitable location for the exhibition, considering the number of companies that could take part in the exhibition. The size of this location will be chosen keeping in mind that this area will hold:
  - the booths of all companies (ideally all in the same area)
  - coffee breaks and lunches for participants, teachers and exhibitorsThe location will have to offer the best conditions for booths visits if any.
- All accounting matters must go directly to ESTRO, with no exceptions.

## Companies

- All companies taking part in the exhibition will be requested to pay:
  - the cost of the floor space
  - the company delegate's full registration
- If companies' presentations are included in the scientific programme through a talk (plenary or in parallel), the company will be required to provide Estro with the corresponding abstract 3 weeks before the starting date of the course. The abstract will be sent by the course coordinator to the course director who will/will not approve it.
- If an advertisement is booked, the company will be requested to send the artwork to their ESTRO contact at the latest 3 weeks before the starting date of the course.