#### MANDATORY COMPETENCY EVALUATION FORM

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Student Name:	Date:	
Evaluator Name:	Site:	

This form is to be completed by the evaluator.

Evaluator: Please mark each task as P (pass), F (fail), or NA (not applicable). For mastery, the student must Pass in each Task listed below unless a specific task is determined N/A by the evaluator.

The competency is a Fail and should be repeated by the student for mastery attainment if the plan is not treatable or unacceptable for treatment or has an error that makes a significant difference in the distribution. Documentation of a Failed competency should be submitted to the program for statistical analysis.

Task		Pass	Fail	N/A	Evaluator Comments
1.	The student completed the plan independently				
2.	Treatment Prescription followed				
3.	Isocenter/Calc Point Placement				
4.	Treatment structures identified (CTV, PTV, etc.)				
5.	Treatment structures covered adequately				
6.	Critical structures contoured (OAR, etc)				
7.	Critical structure doses appropriate				
8.	Hot spot placement				
9.	Beam angle selection				
10.	Treatment accessory devices appropriately utilized				
11.	Dose engine/algorithm appropriate				
12.	Heterogeneity appropriately selected				
13.	Appropriate Dose grid selection				

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Task	Pass	Fail	N/A	Evaluator Comments
14. Image transfer/Fusion				
15. Tx Couch contoured appropriately				
16. Minor contours correct				
17. Independent calculation performed (Hand calc., Computer MU Calc., etc.)				
18. Record and Verify System information correct				
19. Plan can be implemented clinically				
20. Overall plan appropriateness acceptable				
21. Overall plan quality acceptable				
22. Student obtained plan approval from a certified medical dosimetrist or other credentialed practitioner as appropriate prior to treatment				
23. Student obtained plan approval from physician				
24. Planning time reasonable				
25. Able to answer questions relevant to planning of case (cognitive evaluation)*				
26. Interact with others in a mentoring/mentee role as appropriate (affective evaluation)				
27. Courteous and professional behavior displayed (affective evaluation)				

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\* Note: Examples of appropriate questions include the following:

- 1. What would be other possible treatment options for this clinical case?
- 2. What possible complications might the patient experience as a result of this treatment dose?
- 3. What are difficulties that the radiation therapist may experience when implementing this treatment plan?
- 4. What are some benefits of this particular treatment delivery modality, energy, beam arrangement, etc?

### **Evaluator Comments:**

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**Student Comments:** 

Student Signature

Date

**Evaluator Signature** 

Date	

## JPU Medical Dosimetry Educational Program Internship

Mandatory Competency Evaluation Form Grading Rubric The grading rubric below is designed to clearly identify expected behaviors for each item in the Mandatory Competency Evaluation Form. Evaluators are encouraged to include an explanation when an item is marked "N/A".

Task	Pass	Fail	N/A
1.The student completed the plan independently	The student completed all work on the treatment plan working independently	The student did not complete all work on the treatment plan working independently	This item must be completed by the preceptor. N/A will result in student's failure of the competency.
2. Treatment Prescription followed	The student followed the prescription as written by the physician	The student failed to follow the prescription as written by the physician	This item is not applicable to this competency.
3. Isocenter/Calc Point Placement	The student placed the isocenter and/or calculation point properly for this plan based on accepted planning practice and patient anatomy	The student failed to place the isocenter and/or calculation point properly based on accepted planning practice and patient anatomy	This item is not applicable to this competency.
4. Treatment structures identified (CTV, PTV, etc.)	The student identified and segmented (contoured) treatment structures properly for this plan based on accepted planning practice and patient anatomy	The student failed to identify and/or segment (contour) treatment structures properly for this plan based on accepted planning practice and patient anatomy	This item is not applicable to this competency.
5. Treatment structures covered adequately	Treatment plan for the clinical case achieved adequate coverage of treatment structures (PTV, CTV, etc) according to clinical practice standards as specified by RTOG protocol, clinical protocol, and/or physician prescription.	Treatment plan for the clinical case failed to achieve adequate coverage of treatment structures (PTV, CTV, etc) according to clinical practice standards as specified by RTOG protocol, clinical protocol, and/or physician prescription.	This item is not applicable to this competency.
6. Critical structures contoured (OAR, etc)	The student identified and segmented (contoured) critical structures properly for this plan based on accepted planning practice and patient anatomy	The student failed to identify and segment (contour) critical structures properly for this plan based on accepted planning practice and patient anatomy	This item is not applicable to this competency.
7. Critical structure doses appropriate	Treatment plan for the clinical case achieved adequate coverage of critical structures according to clinical practice standards as specified by RTOG protocol, clinical protocol, and/or physician prescription.	Treatment plan for the clinical case did not achieve adequate coverage of critical structures according to clinical practice standards as specified by RTOG protocol, clinical protocol, and/or physician prescription.	This item is not applicable to this competency.

8. Hot spot placement	Treatment plan for the clinical case achieved placement of hot spot according to clinical practice standards as specified by RTOG protocol, clinical protocol, and/or physician prescription.	Treatment plan for the clinical case failed to achieve placement of hot spot according to clinical practice standards as specified by RTOG protocol, clinical protocol, and/or physician prescription.	This item is not applicable to this competency.
9. Beam angle selection	The student selected beam angles properly for this plan based on accepted planning practice and patient anatomy	The student failed to select beam angles properly for this plan according to accepted planning practice and patient anatomy	This item is not applicable to this competency.
10. Treatment accessory devices appropriately utilized	The student selected treatment accessory devices (wedges, custom blocks, bolus, etc.) properly for this plan based on accepted planning practice and patient anatomy	The student failed to select treatment accessory devices (wedges, custom blocks, bolus etc.) properly for this plan according to accepted planning practice and patient anatomy	This item is not applicable to this competency.
11. Dose engine/algorithm appropriate	The student selected the dose engine/calculation algorithm (e.g. Pencil Beam, AAA, Monte Carlo, etc.) properly for this plan based on accepted treatment planning practice	The student failed to select the dose engine/calculation algorithm (e.g. Pencil Beam, AAA, Monte Carlo, etc.) properly for this plan according to accepted treatment planning practice	This item is not applicable to this competency.
12. Heterogeneity appropriately selected	The student utilized heterogeneity corrections properly for this plan based on accepted treatment planning practice	The student failed to utilize heterogeneity corrections properly for this plan according to accepted treatment planning practice	This item is not applicable to this competency.
13. Appropriate Dose grid selection	The student ensured that the dose grid for the plan calculation was appropriate based on accepted treatment planning practice	The student failed to ensure that the dose grid for the plan calculation was appropriate according to accepted treatment planning practice	This item is not applicable to this competency.
14. Image transfer/Fusion	The student performed image data set transfer and fusion (if required) properly for this plan based on accepted planning practice and patient anatomy	The student failed to perform image data set transfer and fusion (if required) properly for this plan based on accepted planning practice and patient anatomy	This item is not applicable to this competency.
15. Tx Couch contoured appropriately	The student contoured the treatment/simulation couch properly for this plan based on accepted planning practice and patient anatomy	The student failed to contour the treatment/simulation couch properly for this plan	This item is not applicable to this competency.
16. Minor contours correct	The student contoured any minor structures (e.g. carina, T-12, etc.) properly for this plan based on accepted planning practice and patient anatomy	The student failed to contour minor structures (e.g. carina, T-12, etc.) when needed or contoured them improperly for this plan	This item is not applicable to this competency.
17. Independent calculation performed (Hand calc., Computer MU Calc., etc.)	The student performed an independent calculation (e.g. hand calc, computer-based MU calc) properly for this plan using accepted planning practice	The student did not perform an independent calculation or failed to perform the independent calculation (e.g. hand calc, computer-based MU calc) properly according to accepted planning practice	This item is not applicable to this competency.

18. Record and Verify System information correct	The student entered and/or verified the Record and Verify information properly for this plan using accepted planning practice	The student failed to enter and/or verify the Record and Verify information properly for this plan using accepted planning practice	This item is not applicable to this competency.
19. Plan can be implemented clinically	The student ensured that the treatment plan can be implemented in the clinic through interaction with other clinical team members (e.g. therapist, dosimetrist, radiation oncologist)	The student failed to ensure that the treatment plan can be implemented in the clinic through interaction with other clinical team members (e.g. therapist, dosimetrist, radiation oncologist)	This item is not applicable to this competency.
20. Overall plan appropriateness acceptable	The overall treatment plan is appropriate according to accepted medical dosimetry practice.	The overall treatment plan is not appropriate according to accepted medical dosimetry practice.	This item is not applicable to this competency.
21. Overall plan quality acceptable	Quality of the treatment plan meets or surpasses clinical practice standards acceptable as specified by RTOG protocol, clinical protocol, and/or physician prescription	Quality of the treatment plan does not meet clinical practice standards acceptable as specified by RTOG protocol, clinical protocol, and/or physician prescription	This item is not applicable to this competency.
22. Student obtained plan approval from a certified medical dosimetrist or other credentialed practitioner as appropriate prior to treatment	Student actively interacted with a CMD or other appropriately credentialed practitioner as appropriate regarding the treatment plan to gain approval prior to implementation.	Student failed to interact with a CMD or other credentialed practitioner as appropriate regarding the treatment plan to gain approval prior to implementation	This item is not applicable to this competency.
23. Student obtained plan approval from physician	Student actively interacted with the physician regarding the treatment plan to gain approval.	Student failed to interact with the physician regarding the treatment plan to gain approval	This item is not applicable to this competency.
24. Planning time reasonable	The amount of time the student utilized to successfully complete a treatment plan is reasonable relative to plan complexity (e.g. 2-6 hours total planning time for simple or intermediate plans, 8 or more hours for complex plans)	The amount of time the student utilized to successfully complete a treatment plan is unreasonable relative to plan complexity	This item is not applicable to this competency.
25. Able to answer questions relevant to planning of case (cognitive evaluation)*	Student confidently and clearly presented answers to evaluator questions relevant to the clinical case.	Student failed to confidently and clearly present answers to evaluator questions relevant to the clinical case.	This item is not applicable to this competency.
26. Interact with others in a mentoring/mentee role as appropriate (affective evaluation)	Student behavior exemplified characteristics of a mentor and/or mentee as appropriate. These behaviors include active eagerness to learn and actively assisting others.	Student behavior failed to exemplify characteristics of a mentor and/or mentee. These behaviors include lack of eagerness to learn and lack of desire to assist others.	This item is not applicable to this competency.

27. Courteous and professional behavior displayed (affective evaluation)	Student behaved in a courteous and professional manner during all interpersonal interactions according to guidelines for the organization in which the student is assigned. *Note: The student must be informed regarding professional behavior guidelines for the organization prior to completing competencies	Student failed to behave in a courteous and professional manner during all interpersonal interactions according to guidelines for the organization in which the student is assigned.	This item is not applicable to this competency.
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