



**Universidade Federal do Ceará
Pró-Reitoria de Pesquisa e Pós-Graduação**

FORMULÁRIO PARA CRIAÇÃO DE COMPONENTE CURRICULAR

1. IDENTIFICAÇÃO DO PROGRAMA: CIÊNCIAS MORFOFUNCIONAIS		
Programa	Pós-graduação em Ciências Morfológicas	
2. TIPO DE COMPONENTE:		
Atividade ()	Disciplina ()	Módulo (x)
3. NÍVEL:		
Mestrado (x)		Doutorado (x)
4. IDENTIFICAÇÃO DO COMPONENTE:		
Nome:		Educational Innovation, Science and Active Learning Methods
Carga Horária	48 horas	
Nº de Créditos:	3	
Optativa:	Sim (x)	Não ()
Obrigatória:	Sim ()	Não (x)
Área de Concentração:	Ensino e divulgação das Ciências Morfológicas	
5. DOCENTE RESPONSÁVEL:		
MARIA JOSÉ COSTA DOS SANTOS GILBERTO SANTOS CERQUEIRA		
6. JUSTIFICATIVA:		
The present discipline is justified due to the growing demand for trained professionals to carry out research activities in education using active teaching and learning methods.		
7. OBJETIVOS:		
<ul style="list-style-type: none">• Understand the fundamental elements of student-centered education.• Enable the student to critically understand the main characteristics of active learning.• Introduce you to the main research methods and techniques with active methodologies.• Study understanding of active learning models.		
8. EMENTA:		
Fundamentals of Student-Centered Education: Concepts; Background Teaching and active learning techniques. Information and communication technologies in distance education; public policies Modern pedagogical/andragogical theories. Education in the 21st century. Teaching and learning in the digital age: teaching-learning methodological issues. Methodological and technological innovations in		

the teaching process. Preparation of training and teamwork; FISHBOWL, Arch of Maguerez. PBL The inverted classroom. Inverted learning model. Implementation of the inverted classroom. Peer Instruction. Content preparation for inverted class. Reflective practices during the inverted class. Assessment and self-assessment of the inverted class.

9. PROGRAMA DA DISCIPLINA/ATIVIDADE/MÓDULO:

Fundamentals of Student-Centered Education: Concepts; Background Teaching and active learning techniques. Information and communication technologies in distance education; public policies Modern pedagogical/andragogical theories. Education in the 21st century. Teaching and learning in the digital age: teaching-learning methodological issues. Methodological and technological innovations in the teaching process. Preparation of training and teamwork; FISHBOWL, Arch of Maguerez. PBL

10. FORMA DE AVALIAÇÃO E FREQUÊNCIA:

During the course, students must attend to the activities corresponding to each discipline, with students who fail to obtain at least 75% (seventy-five percent) of the workload of the discipline. Students will be assessed using active methodologies such as problem-based learning, project-based learning, team-based learning, seminars, hands-on testing, and seminars

Bibliografia Básica

BROWN, J.S.; COLLINS, A.; DUGUID, P. Situated cognition and the culture of learning. *Educational Researcher* 1989; 18(1):32-42.

DENT, J.A.; HARDEN M.R. *A practical guide for medical Teacher*. 14º ed. 2013
HARDEN, R. M.; LÍLLEY, P. *The Eight Roles of the Medical Teacher*, ELSEVIER, 2018.

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Mucke J, Anders HJ, Aringer M, Chehab G, Fischer-Betz R, Hiepe F, et al. Swimming against the stream: the fishbowl discussion method as an interactive tool for medical conferences: experiences from the 11th European Lupus Meeting. *Ann Rheum Dis*. 2019;78(5):713-4.

MUNHOZ, A. S. ABP - Aprendizagem Baseada em Problemas. São Paulo, SP: Cengage Learning, 2016, 260p. VEIGA, I. P. A. (Org.). Formação Médica e Aprendizagem Baseada em Problemas. Campinas, SP: Papirus Editora, 2016, 336p.

MICHAELSEN, L.K.; ARLETTA, B.K.; DEE FINK, L. **Team-based learning: a transformative use of small groups.** New York; 2002.

MICHAELSEN, L.K.; SWEET, M. **The essential elements of Team-Based Learning.** New Directions for Teaching and Learning, 2008, [on line] 116:7-27. Disponível em: <http://www.albany.edu/teachingand learning/library/michaelsen.pdf>. Acesso em 20 mai 2018.

MICHAELSEN, L.K. **Team Learning in Large Classes.** Inc. Bouton & R.Y. Garth, Learning in Groups. New Directions for Teaching and Learning Series, No. 14. San Francisco: Jossey-Bass, 1983.

MICHAELSEN, L.K.; BLACK, R.H. **Building Learning Teams: The Key to Harnessing the Power of Small Groups in Higher Education.** In: Kadel S, and Keehner J (eds). Collaborative Learning: A Sourcebook for Higher Education. State College, Pa.: National Center for Teaching, Learning and Assessment; 1994.

MICHAELSEN, L.K.; WATSON, W.E.; BLACK, R.H. **A Realistic Test of Individual versus Group Consensus Decision Making.** *Journal of Applied Psychology* 1989; 74 (5): 834-839.

Bibliografia Complementar:

BERGMANN, J.; AARON, S. (Org). **Sala de Aula Invertida - Uma Metodologia Ativa de Aprendizagem.** Rio de Janeiro, RJ, 2016, 116p.

DIESEL, A. et al. Os princípios das metodologias ativas de ensino: uma abordagem teórica. *Revista Thema.* [online] 2017, Vol. 14, nº 1, p. 268-288

MAMEDE, S. (Org.) ; PENAFORTE, J. (Org.). **Aprendizagem Baseada em Problemas : anatomia de uma nova abordagem educacional.** Fortaleza, CE : Editora Hucitec Ltda, 2001, 232p.

SCHNEIDER, Elton Ivan. et al. Sala de Aula Invertida em EAD: uma proposta de Blended Learning. *Revista Intersaber*, vol. 8, n.16, p.68-81, 2013.

Trâmite/Aprovação nas Instâncias Colegiadas:

I. Aprovado em Reunião do Colegiado da Coordenação do Curso em:

Fortaleza, ____ / ____ / ____

Coordenador(a)

II. Aprovado em Reunião do Conselho de Departamento em:

Fortaleza, ____ / ____ / ____

Chefe do Departamento

III. Aprovado em Reunião do Conselho de Centro/Faculdade em:

Fortaleza, ____ / ____ / ____

Diretor(a)

IV. Aprovado em Reunião da Câmara de Pesquisa e Pós-Graduação em:

Fortaleza, ____ / ____ / ____

Pró-Reitor(a) de Pesquisa e Pós-Graduação